

S6161-CF-FSE-010

0910-LP-108-9799

REVISION 2

**TECHNICAL MANUAL
FOR
COFFEE BREWER, MODELS OT AND RT
DESCRIPTION, OPERATION AND MAINTENANCE**

Supersedure Notice: This manual supersedes
S6161-CF-FSE-010, Revision 1, dated 15 November 2000
and all changes thereto.

“Distribution Statement “A”: Approved for public release;
distribution is unlimited.”

**DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND**

15 MAY 2009

IDENTIFYING TECHNICAL PUBLICATION SHEET FOR COMMERCIAL MANUAL

1. PURPOSE: This technical publication sheet is issued for the purpose of identifying and authorizing the following commercial manual for Navy use.

Manufacturer: Bunn-O-Matic Corporation
Post Office Box 3227
Springfield, IL 62708-3227
Cage 25628

Purchase Order or Contract No.: N62793-03-G-0001

Requisition No.: N/A

Equipment: Model RTF-35

National Stock Number: 0910-LP-108-9799

Title: Coffee Brewer, Models OT and RT; Description, Operation and Maintenance

Additional Identification: N/A

Date: N/A

2. ADDITIONAL COPIES: Additional copies are available from the Naval Logistics Library (NLL).

3. FILE LOCATION: The above-described commercial manual is filed in _____.

4. AUTHORITY NOTICE AND DISTRIBUTION STATEMENT:

Published by direction of Commander, Naval Sea Systems Command.

Distribution Statement A: Approved for public release; distribution is unlimited.

FOR UNCLASSIFIED MANUALS

NOTICE: Reproduction for non-military use of the information or illustration in this publication is not permitted. The policy for military use reproduction is established in OPNAVINST 5510.1B.

This material may be reproduced by or for the U.S. Government pursuant to the rights acquired under Article 42 of Newport News Shipbuilding Purchase Order DoD Contracts Appendix A dated December 2007.

COFFEE BREWER, MODELS OT AND RT

DESCRIPTION, OPERATION AND MAINTENANCE

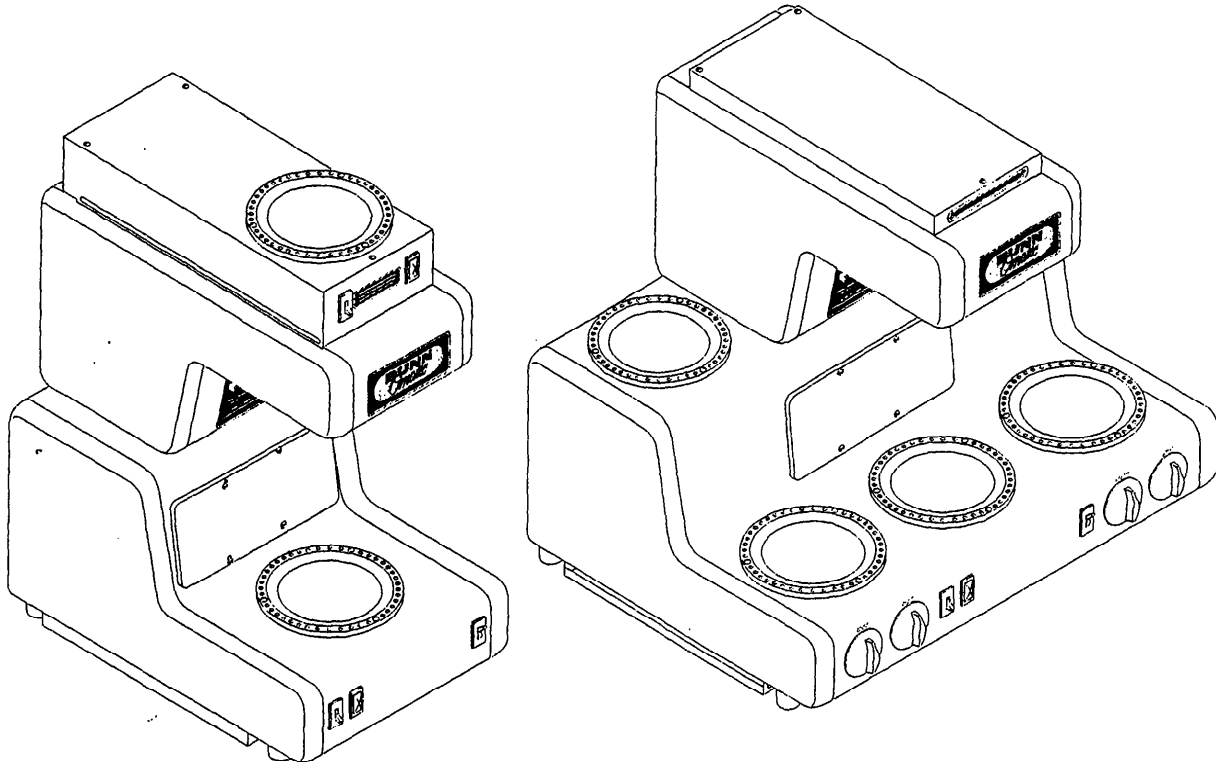
Part	Title
I	Operating & Service Manual with Illustrated Parts Catalog for Models OT & RT, Serial Numbers before RT00005364 with Analog Timer
II	Operating & Service Manual with Illustrated Parts Catalog for Models OT & RT, Serial Numbers RT00005364 and up with Digital Timer

Part I

Operating & Service Manual with Illustrated Parts Catalog for Models
OT & RT, Serial Numbers before RT00005364 with Analog Timer

BUNN®

OT & RT



OPERATING & SERVICE MANUAL

BUNN-O-MATIC CORPORATION

POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS 62708-3227

PHONE: (217) 529-6601 FAX: (217) 529-6644

CONTENTS

Introduction	2
User Notices	3
Electrical Requirements	4
Plumbing Requirements	4
Initial Set-Up	5
Operating Controls	6
Coffee Brewing	7
Cleaning	7
Troubleshooting	8
Service	12
Wiring Diagrams	26

INTRODUCTION

This equipment will brew a half-gallon batch of coffee into an awaiting decanter at the press of a button. The OT has two and the RT has five warmers to keep the beverage at the right temperature, on the RT one of which is capable of heating water to boiling. The brewer is only for indoor use on a sturdy counter or shelf.

BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("Bunn") warrants the equipment manufactured by it to be commercially free from defects in material and workmanship existing at the time of manufacture and appearing within one year from the date of installation. This warranty does not apply to any equipment, component or part that was not manufactured by Bunn or that, in Bunn's judgement, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of Bunn are not authorized to make modifications to this warranty or to make additional warranties that are binding on Bunn. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

The Buyer shall give Bunn prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois, 62708-3227. If requested by Bunn, the Buyer shall ship the defective equipment prepaid to an authorized Bunn service location. If Bunn determines, in its sole discretion, that the equipment does not conform to the warranty, Bunn shall repair the equipment with no charge for parts during the one year warranty period and no charge for labor by a Bunn Authorized Service Representative during the one year warranty period. If Bunn determines that repair is not feasible, Bunn shall, at its sole option, replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AS SPECIFIED HEREIN, TO REPAIR OR, AT BUNN'S SOLE OPTION, REPLACEMENT OR REFUND. Bunn shall not be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

USER NOTICES

Carefully read and follow all notices on the equipment and in this manual. They were written for your protection. All notices on the equipment should be kept in good condition. Replace any unreadable or damaged labels.

00831.0000

⚠ WARNING
<ul style="list-style-type: none"> ◆ Fill water tank before turning -on thermostat or connecting appliance to power source. ◆ Use only on a properly protected circuit capable of the rated load. ◆ Electrically ground the chassis. ◆ Follow national/local electrical codes. ◆ Do not use near combustibles.
FAILURE TO COMPLY RISKS EQUIPMENT DAMAGE, FIRE, OR SHOCK HAZARD
READ THE ENTIRE OPERATING MANUAL BEFORE BUYING OR USING THIS PRODUCT
THIS APPLIANCE IS HEATED WHENEVER CONNECTED TO A POWER SOURCE
00831.0000F 3/98 © 1988 BUNN-O-MATIC CORPORATION

00658.0000

⚠ WARNING	
 <p>FUNNEL CONTENTS ARE HOT</p>	<p>DISCARD DECANTER IF:</p> <ul style="list-style-type: none"> • CRACKED • SCRATCHED • BOILED DRY • HEATED WHEN EMPTY • USED ON HIGH FLAME OR EXPOSED ELECTRIC ELEMENTS
<p>READ THE ENTIRE OPERATING MANUAL BEFORE USING THIS PRODUCT</p> <p>FAILURE TO COMPLY RISKS INJURY</p>	
<p>PN: 00658.0000F 6/98 © 1985 BUNN-O-MATIC CORPORATION</p>	

This equipment is to be installed to comply with the Basic Plumbing Code of the Building Officials and Code Administrators International, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

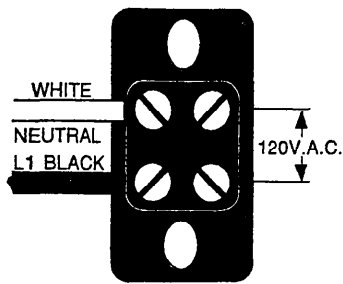
00656.0000

⚠ WARNING
<p>HIGH HEAT WARNER</p> <p>DO NOT BOIL DECANTER DRY KEEP COMBUSTIBLES AWAY</p> <p>FAILURE TO COMPLY RISKS GLASS FAILURE/HOT LIQUID BURNS AND FIRE HAZARD</p>

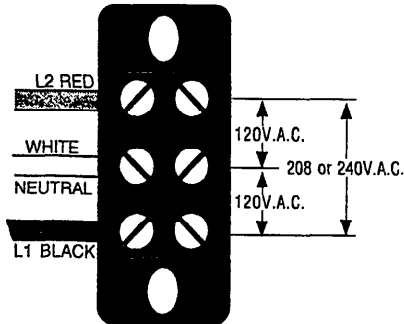
00688.0000

ELECTRICAL REQUIREMENTS

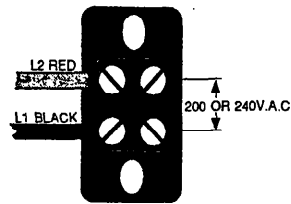
CAUTION - Do not connect the brewer to the power source until specified in Initial Set-Up.



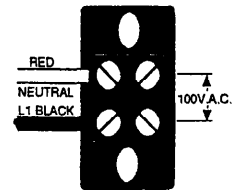
MODELS OT15 & 20 require 2-wire, grounded service rated 120 volts ac, 15 or 20 amp respectively, single phase, 60 Hz. Model 15 has an attached cordset.



MODELS OT35 & RT35 require 3-wire, grounded service rated 120/208 or 120/240 volts ac, 20 amp, single phase, 60 Hz.



MODELS OTA, RTA & RT35B require 2-wire, grounded service rated 240 volts ac or 200 volts ac, 20 amp single phase, 50 Hz.



MODEL RT25B requires 2-wire, grounded service rated 100 volts ac, 20 amp single phase, 50 Hz.

Electrical Hook-Up

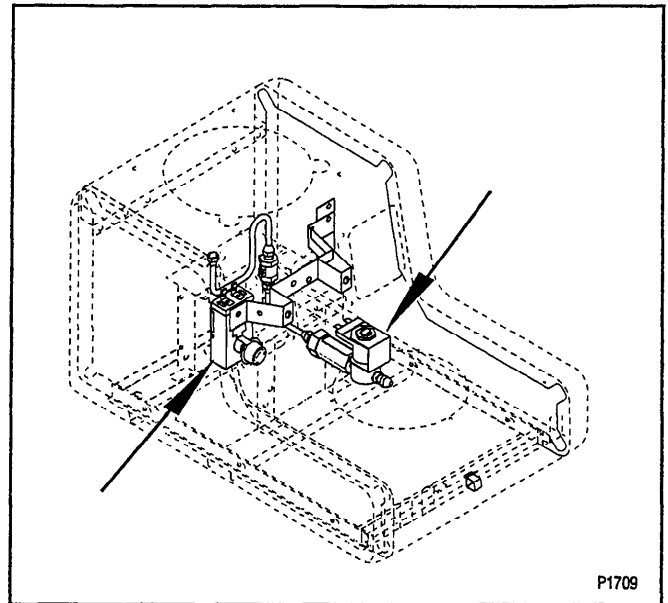
Model OT15 has an attached cordset.
Models OT20, OT35, & RT35, proceed as follows:

CAUTION – Improper electrical installation will damage electronic components.

1. An electrician must provide electrical service as specified.
2. Using a voltmeter, check the voltage and color coding of each conductor at the electrical source.
3. Remove the front panel beneath the sprayhead and rotate the control thermostat knob fully counterclockwise to the "OFF" position and replace the panel.
4. Remove the rear panel, feed the cord through the strain relief, and connect it to the terminal block.
5. Connect the brewer to the power source and verify the voltage at the terminal block before proceeding. Replace the rear panel.
6. If plumbing is to be hooked-up later be sure the brewer is disconnected from the power source. If Plumbing has been hooked-up, the brewer is ready for Initial Set-Up.

PLUMBING REQUIREMENTS

This brewer must be connected to a **cold** water system with operating pressure between 20 and 90 psi from a 1/2" or larger supply line. A shut-off valve should be installed in the line before the brewer. Install a regulator in the line when pressure is greater than 90 psi to reduce it to 50 psi. The water inlet fitting is 1/4" flare.



NOTE - Bunn-O-Matic recommends 1/4" copper tubing for installations of less than 25 feet and 3/8" for more than 25 feet from the 1/2" water supply line. A tight coil of copper tubing in the water line will facilitate moving the brewer to clean the counter top. Bunn-O-Matic does not recommend the use of a saddle valve to install the brewer. The size and shape of the hole made in the supply line by this type of device may restrict water flow.

This equipment must be installed to comply with the Basic Plumbing Code of the Building Officials and Code Administrators International, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

PLUMBING REQUIREMENTS (Cont.)

Plumbing Hook-Up

Model OT15 has an attached water strainer, proceed to step 2.

Models OT20, OT35, & RT35, proceed as follows:

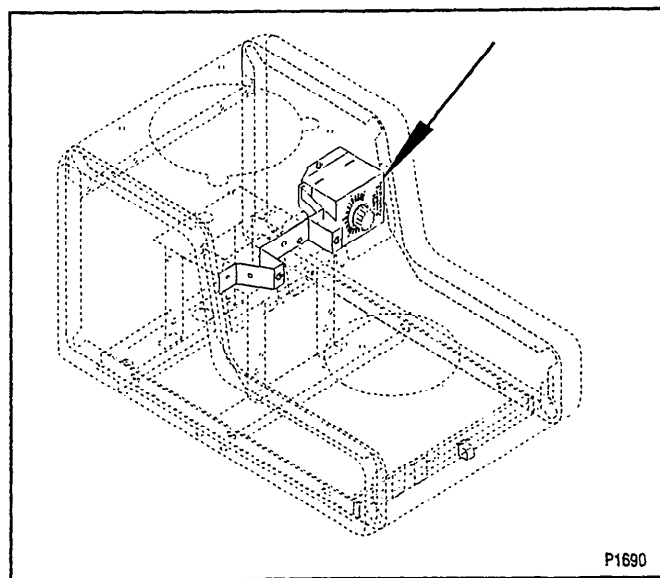
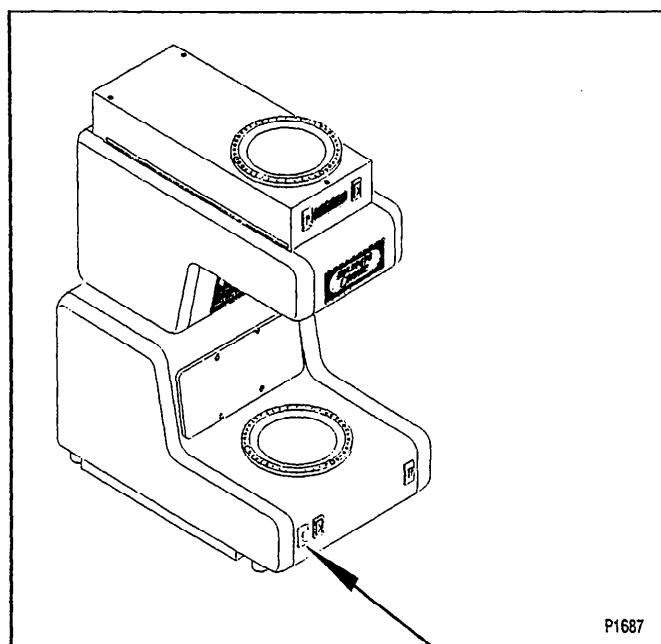
1. Remove the rear panel and bottom pan. Run the long piece of tubing from the strainer (supplied) under the brewer and attach it to the water inlet fitting on the solenoid. Reinstall the bottom pan and rear panel.
2. Flush the water line and securely attach it to the 1/4" flare fitting on the strainer.
3. Turn on the water supply.

INITIAL SETUP

CAUTION - The brewer must be disconnected from the power source throughout the initial set-up, except when specified in the instructions.

1. Remove the front panel.
2. Rotate the control thermostat knob fully counterclockwise to the "OFF" position and replace the panel.
3. Insert an empty funnel into the funnel rails.
4. Place a decanter containing a small amount of water on the warmer beneath the funnel.
5. Connect the brewer to the power source, place the On/Off brew station warmer switch in the upper position, and momentarily press the start switch. Water will begin flowing into the tank. When water stops flowing into the tank, initiate a second and a third brew cycle. During this third brew cycle the tank will fill to its capacity and the excess will flow from the sprayhead, out of the funnel, and into the decanter.
6. Place the On/Off brew station warmer switch in the lower position.
7. Disconnect the brewer from the power source.
8. Remove the front panel.
9. Rotate the control thermostat knob fully clockwise to the "ON" position and replace the front panel.
10. Connect the brewer to the power source and wait approximately twenty minutes for the water in the tank to heat to the proper temperature. Some water will drip from the funnel during this time; this is due to expansion and should not occur thereafter.
11. Place an empty decanter under the funnel.
12. Place the On/Off brew station warmer switch in the upper position and momentarily press the start switch. Empty the decanter after water has stopped flowing from the funnel.
13. Allow the water in the tank to reheat to the proper temperature.
14. Place an empty decanter on the warmer and press the start switch. Check the water volume in the decanter after water has stopped flowing from the funnel. It should be 64 ounces.
15. If not, disconnect the brewer from the power source and remove the front panel.
16. Adjust the brew timer dial as required. Replace the front panel, connect the brewer to the power source, start, and measure another brew cycle.
17. Repeat steps 13-16 until 64 oz water volume is achieved.

NOTE - The On/Off brew station warmer switch must be in the upper position to initiate and complete a brew cycle.



OPERATING CONTROLS

MODELS OT & RT

A. On/Off Brew Station Warmer Switch

Placing the switch in the upper position supplies power to the brew station warmer and enables brewing. Placing the switch in the lower position cuts power to the brew station warmer and stops brewing. Stopping a brew cycle after it has been started will not stop the flow of water into the funnel until the tank syphons down to its proper level.

NOTE - The On/Off brew station warmer switch must be in the upper position to initiate and complete a brew cycle.

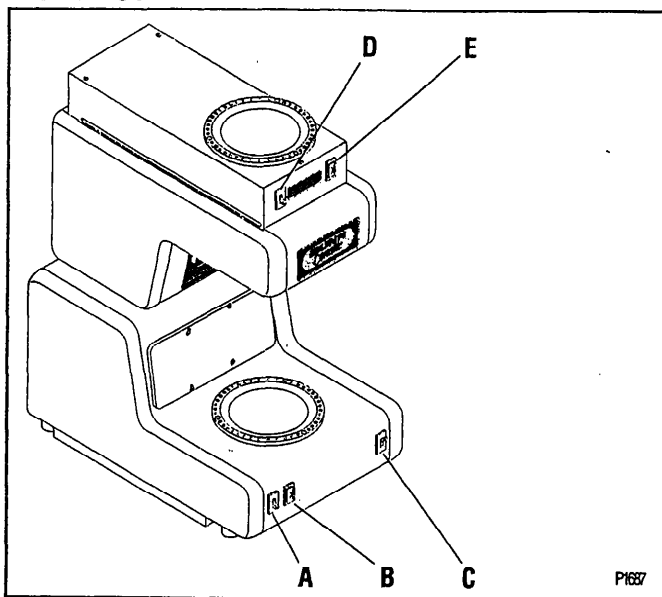
B. On/Off Brew Station Warmer Indicator Lamp

Glowes whenever the On/Off brew station warmer switch is in the upper position showing that the warmer is on and that the automatic brew cycle can be started.

C. Start Switch

Starts a brew cycle when the On/Off brew station warmer switch is in the upper position.

MODEL OT



D. Upper Warmer Switch

Placing the switch in the upper position supplies power to the upper warmer. Placing the switch in the lower position cuts power to the upper warmer.

E. Upper Warmer Indicator Lamp

Glowes whenever the upper warmer switch is in the upper position showing that the warmer is on.

F. Left Rear Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the left rear warmer. Rotating the knob to the "OFF" position cuts power to the left rear warmer.

G. Left Front Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the left front warmer. Rotating the knob to the "OFF" position cuts power to the left front warmer.

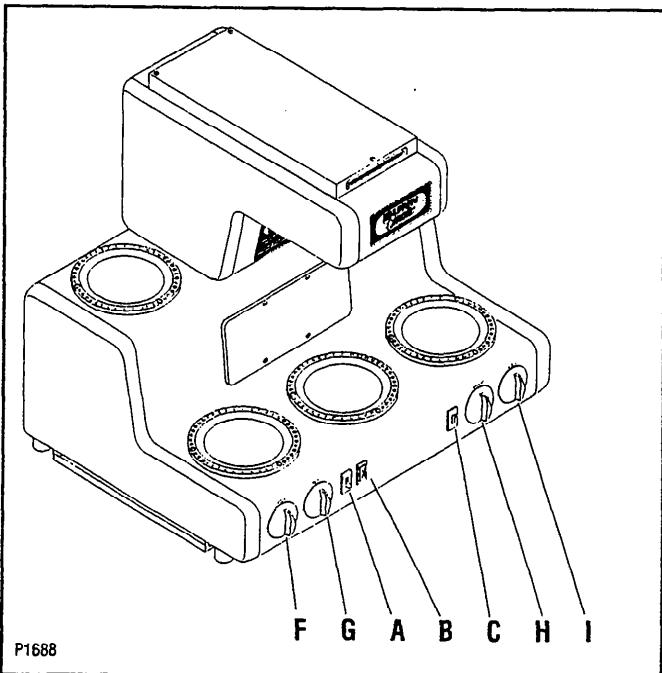
H. Right Front Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the right front warmer. Rotating the knob to the "OFF" position cuts power to the right front warmer.

I. Right Rear Warmer Three Heat Rotary Switch

Rotating the knob to the "LO", "MED", or "HIGH" positions supply power to the right rear warmer. Rotating the knob to the "OFF" position cuts power to the right rear warmer. The "HIGH" position of this switch makes the warmer capable of boiling water.

MODEL RT



COFFEE BREWING

Start each brew cycle with an empty, clean, half-gallon decanter.

1. Insert a BUNN® filter into the funnel.
2. Pour the fresh coffee into the filter and level the bed of grounds by gently shaking.
3. Slide the funnel into the funnel rails.
4. Place the On/Off brew station warmer switch in the upper position.
5. Momentarily press the start switch.
6. When brewing is completed, simply discard the grounds and filter.

CLEANING

1. The use of a damp cloth rinsed in any mild, non-abrasive, liquid detergent is recommended for cleaning all surfaces on Bunn-O-Matic equipment.
2. Check and clean the sprayhead. The sprayhead holes must always remain open.
3. With the sprayhead removed, insert the deliming spring (provided) all the way into the sprayhead tube. When inserted properly, no more than two inches of spring should be visible. Saw back and forth five or six times. Then, repeat this step for the air vent tube.

NOTE - In hard water areas, this may need to be done daily. It will help prevent liming problems in the brewer and takes less than a minute.

TROUBLESHOOTING

A troubleshooting guide is provided to suggest probable causes and remedies for the most likely problems encountered. If the problem remains after exhausting the troubleshooting steps, contact the Bunn-O-Matic Technical Service Department.

- Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel.
- All electric components have 120 volt ac voltage on their terminals. Shorting of terminals or the application of external voltages may result in equipment failure.
- Intermittent operation of electronic equipment is unlikely. Component failure will normally be permanent. If an intermittent condition is encountered, the cause will likely be a switch contact or a loose connection at a terminal or crimp.
- Solenoid removal requires interrupting the water supply to the valve. Damage may result if solenoids are energized for more than ten minutes without a supply of water.
- The use of two wrenches is recommended whenever plumbing fittings are tightened or loosened. This will help to avoid twists and kinks in the tubing.
- Make certain that all plumbing connections are sealed and electrical connections tight and isolated.
- This brewer is heated at all times unless disconnected from the power source. Keep away from combustibles.

WARNING

- Exercise extreme caution when servicing electrical equipment.
- Disconnect the brewer from the power source when servicing, except when electrical tests are specified.
- Follow recommended service procedures
- Replace all protective shields or safety notices

Problem	Probable Cause	Remedy
Equipment will not operate.	1. No power or incorrect voltage	(A) Connect the brewer to the power source.
		(B) Check the terminal block for the proper voltages.
		(C) Check circuit breaker/fuse.
Brew cycle will not start.	1. No water	Check plumbing and shut-off valves.
	2. Water Strainer	(A) Direction of flow arrow must be pointing towards brewer.
		(B) Remove the strainer and check for obstructions. Clear or replace.
	3. Flow Control	(A) Direction of flow arrow must be pointing away from the solenoid.
		(B) Remove the control and check for obstructions. Clear or replace.

TROUBLESHOOTING (cont.)**Problem****Probable Cause****Remedy**

Brew cycle will not start. (cont.)

4. On/Off Brew Station Warmer Switch

Refer to Service - On/Off Brew Station Warmer Switch for testing procedures. See page 17.

5. Start Switch

Refer to Service - Start Switch for testing procedures. See page 23.

6. Brew Timer

Refer to Service - Brew Timer for testing procedures. See page 13.

7. Solenoid Valve

Refer to Service - Solenoid Valve for testing procedures. See page 22.

Water flows into tank continuously (On/Off brew station warmer switch "OFF").

1. Solenoid Valve

Refer to Service - Solenoid Valve for testing procedures. See page 22.

Water flows into tank continuously (On/Off brew station warmer switch "ON").

1. Brew Timer

Refer to Service - Brew Timer for testing procedures. See page 13.

Water is not hot.

1. Limit Thermostat

Refer to Service - Limit Thermostat for testing procedures. See page 21.

CAUTION

Do not eliminate or bypass limit thermostat. Use only B.O.M. replacement part #04680.0000

2. Control Thermostat

Refer to Service - Control Thermostat for testing procedures. See page 14.

3. Tank Heater

Refer to Service - Tank Heater for testing procedures. See page 24.

Decanter warmer is not hot.

1. Warmer Switches

(A) The Warmer Switch(es) must be in the "ON" position for the warmer to operate.

(B) Refer to Service - Warmer Switch(es) for testing procedures. See pages 17, 18, & 19.

2. Decanter Warmers

Refer to Service - Warmers for testing procedures. See pages 15 & 16.

TROUBLESHOOTING (cont.)

Problem	Probable Cause	Remedy
Spitting or unusual steaming from sprayhead.	1. Control Thermostat	Refer to Service - Control Thermostat for testing procedures. See page 14.
	2. Lime build-up	Inspect the tank assembly for excessive lime deposits. Delime as required.
CAUTION Tank and tank components should be delimed regularly depending on local water conditions. Excessive mineral build-up on stainless steel surfaces can initiate corrosive reactions resulting in serious leaks.		
Inconsistent beverage level in decanter.	1. Flow control	(A) Direction of flow arrow must be pointing away from the solenoid. (B) Remove the control and check for obstructions. Clear or replace.
	2. Improper water pressure	Check the operating water pressure to the brewer. It must be between 20 and 90 psi.
	3. Syphon system	Water should flow freely from the sprayhead for approximately twenty seconds after the brew solenoid has shut-off and then stop flowing abruptly. The brewer must be level from front-to-back to syphon properly.
Consistently high or low beverage level in decanter.	1. Brew Timer adjustment	Adjust the brew timer as required to achieve the recommended 64 oz for each brew cycle.
Dripping from sprayhead.	1. Syphon system	Water should flow freely from the sprayhead for approximately twenty seconds after the brew solenoid has shut-off and then stop flowing abruptly. The brewer must be level from front-to-back to syphon properly.
	2. Solenoid Valve	Refer to Service - Solenoid Valve for testing procedures. See page 22.

TROUBLESHOOTING (cont.)**Problem****Probable Cause****Remedy**

Beverage overflows decanter.

1. Beverage left in decanter

The brew cycle should be started only with an empty decanter under the funnel.

Weak beverage.

1. Type of paper filters

BUNN® paper filters should be used for proper extraction.

2. Coffee

A sufficient quantity of fine or drip grind coffee should be used for proper extraction.

3. Sprayhead

B.O.M. sprayhead #01082.0000 should be used to properly wet the bed of ground coffee in the funnel.

4. Funnel loading

The BUNN® paper filter should be centered in the funnel and the bed of coffee leveled by gentle shaking.

5. Water temperature

Place a funnel over an empty decanter on the warmer beneath the sprayhead. Place the On/Off brew station warmer switch in the upper position, press the start switch, and check the water temperature immediately below the sprayhead with an accurate thermometer. The reading should not be less than 195° F. Adjust the control thermostat slightly clockwise to increase the water temperature.

Brewer is making unusual noises.

1. Solenoid Valve

The nut on top of the solenoid valve must be tight or it will vibrate during operation.

2. Plumbing lines

Plumbing lines should not rest on the counter top.

3. Water supply

(A) The brewer must be connected to a cold water line.

(B) Water pressure to the brewer must not be higher than 90 psi. Install a regulator if necessary to lower the working pressure to approximately 50 psi.

SERVICE

This section provides procedures for testing and replacing various major components used in this brewer should service become necessary. Refer to Troubleshooting for assistance in determining the cause of any problem.

Component Access

WARNING - Disconnect the brewer from the power source before the removal of any panel or the replacement of any component.

The brew timer, and control thermostat are located behind the front panel, FIG. 1 located beneath the brew funnel, attached with four #8-32 slotted-head screws.

The base warmer(s), switch(es), indicator lamp, start switch, tank "keep warm" heater, terminal block, and solenoid valve, are located in the base. Access is gained by removing the rear panel, FIG. 1 attached with two #8-32 slotted-head screws

The limit thermostat, and tank heater are located on the tank lid. Access is gained by removing the top lid, FIG. 1 attached with three #8-32 slotted head screws. On the model OT, the upper warmer, switch, and associated indicator lamp are located on this removable top lid.

WARNING - Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel. The brewer should be disconnected from the power source when servicing, except when electrical tests are required and the test procedure specifically states to connect the brewer to the power source.

Contents

Brew Timer	13
Control Thermostat	14
Warmer(s)	
OT: Brew Station & Upper	15
RT: Left Rear, Left Front, Brew Station, & Right Front ...	15
RT: Right Rear Three Heat	16
Warmer Switch(es)	
OT: On/Off Brew Station & Upper	17
RT: On/Off Brew Station	17
RT: Left Rear, Left Front, & Right Front Rotary	18
RT: Right Rear Three Heat Rotary	19
Indicator Lamp(s)	20
Limit Thermostat	21
Solenoid Valve	22
Start Switch	23
Tank Heater	24
Thermal Cut-off	25
Wiring Schematics	26

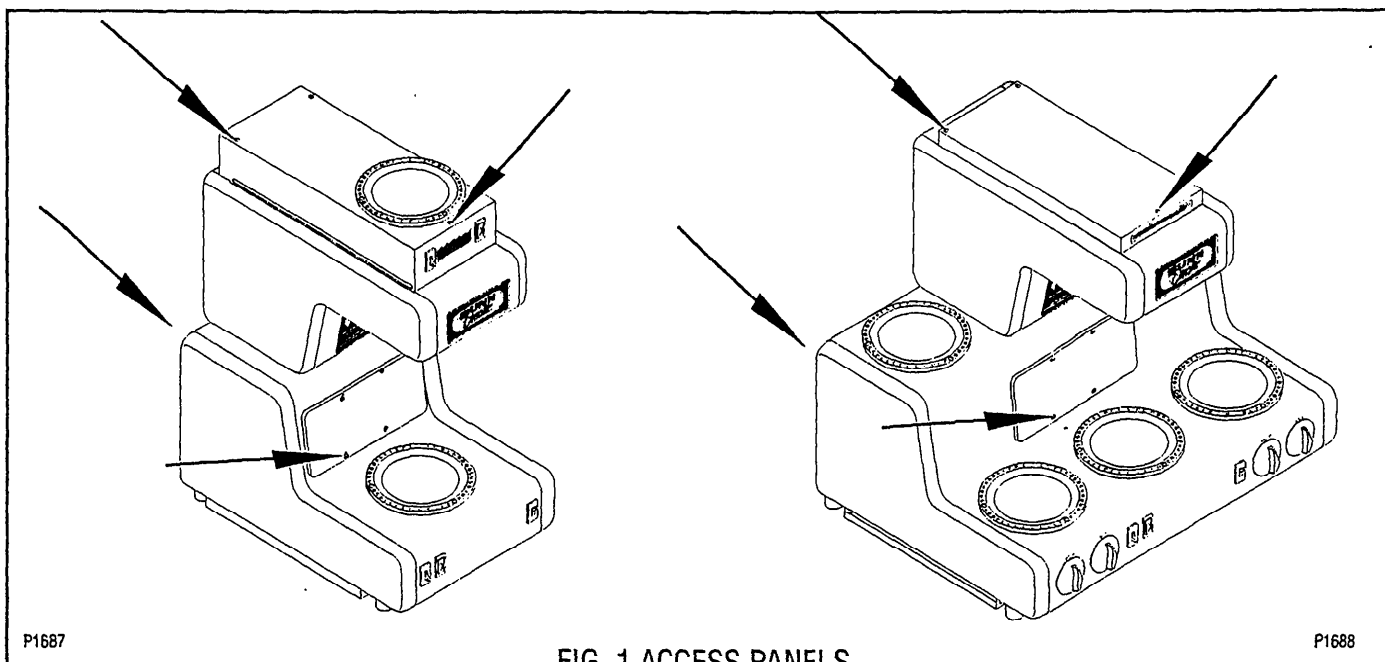
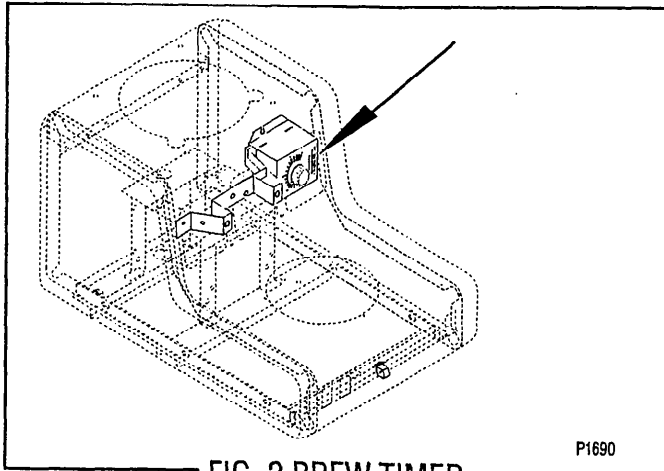


FIG. 1 ACCESS PANELS

SERVICE (cont.)**Brew Timer****FIG. 2 BREW TIMER**

P1690

Location:

The brew timer is located behind the front panel to the right of the tank, FIG. 2.

Test Procedure:

1. Disconnect the brewer from the power source and separate the polarized, three-pin connectors between the timer and brewer wiring harness and rotate the brew timer dial fully counterclockwise.
2. Check the voltage across sockets 2 & 3 (white or red and black wires) of the female connector with a voltmeter when the On/Off brew station warmer switch is in the upper position. Connect the brewer to the power source. The indication must:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across sockets 1 & 2 (blue and white or red wires) of the female connector with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and held. Connect the brewer to the power source. The indication must be as described in step 2, until the start switch is released.
5. Disconnect the brewer from the power source.

If voltage is present as described, reconnect the polarized, three-pin connectors, and proceed to #6.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

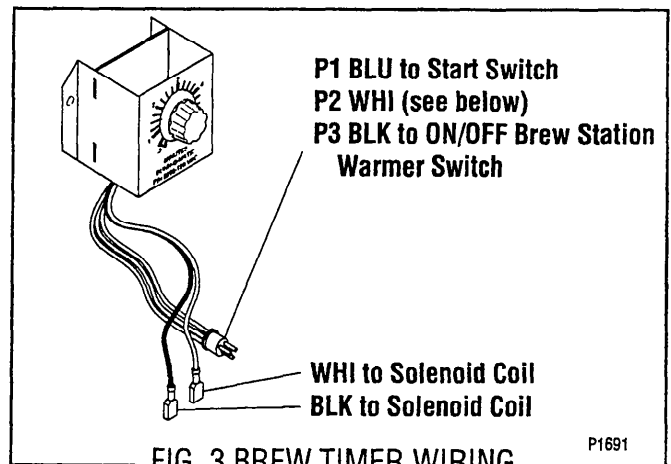
6. Disconnect the in-line connectors on the black and white wires from the timer to the solenoid.
7. Check the voltage across the black and white wires with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and released. Connect the brewer to the power source. The indication must be as described in step 2, for approximately 20 seconds and then return to its previous indication.
8. Disconnect the brewer from the power source.

If voltage is present as described, the brew timer is operating properly. Reset the timer dial as required, to obtain the desired brew volume.

If voltage is not present as described, replace the brew timer.

Removal and Replacement:

1. Separate all connectors between the brewer wiring harness and the timer.
2. Remove the two 8-32 slotted-head screws holding the timer to the bracket.
3. Install the new timer to the bracket.
4. Refer to FIG.3 when reconnecting the wires.
5. Readjust the timer dial as required.

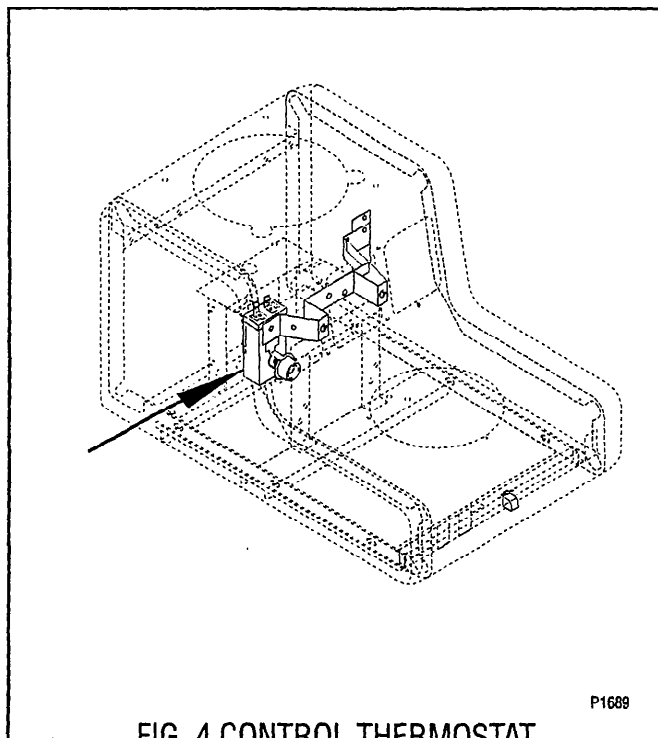
**FIG. 3 BREW TIMER WIRING**

P1691

MODEL

OT WHI to Indicator Lamp

RT WHI to Brew Station Warmer

SERVICE (cont.)**Control Thermostat****FIG. 4 CONTROL THERMOSTAT****Location:**

The control thermostat is located behind the front panel, FIG. 4 to the left of the tank.

To test the control thermostat, access will also be needed to the tank heater located in the top of the brewer.

Test Procedure:

1. Disconnect the brewer from the power source.
2. Check the voltage across the blue wire on the control thermostat and the white or red wire on the tank heater with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across the black wire terminal of the control thermostat and the white or red wire on the tank heater with a voltmeter when the control thermostat is turned "ON" (fully clockwise). Connect the brewer to the power source.

The indication must be as described in step 2. Voltage must not be indicated across these terminals when the thermostat is turned "OFF" (fully counterclockwise).

5. Disconnect the brewer from the power source.

If voltage is present as described, the control thermostat is operating properly.

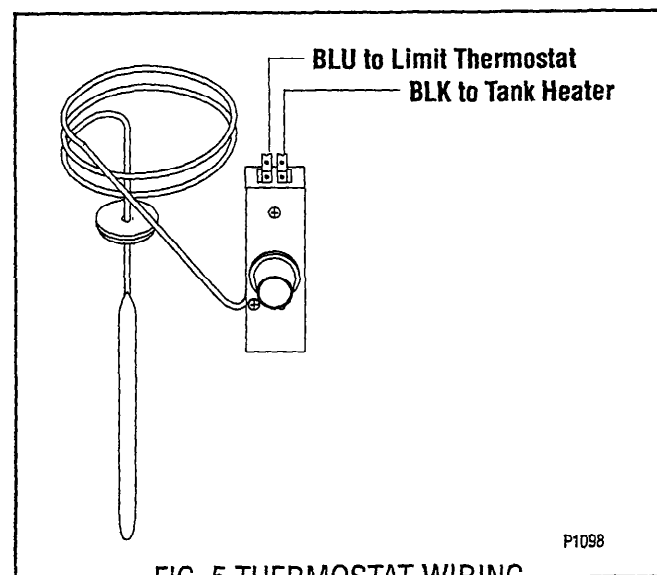
If voltage is not present as described, replace the control thermostat.

Removal and Replacement:

1. Remove both wires from the control thermostat terminals.
2. Remove the top lid from the brewer to gain access to the thermostat bulb.
3. Remove the thermostat bulb by firmly pulling-up on the capillary tube at the tank lid. This will disengage the grommet from the tank lid.
4. Remove the two #8-32 screws holding the control thermostat to the bracket.
5. Fasten the new control thermostat to the brewer housing.
6. Route the capillary tube up through the brewer trunk.

NOTE - Make sure that the capillary tube is away from any electrical termination and is not kinked.

7. Slide the grommet to the red mark on the capillary tube.
8. Insert the bulb through the hole in the tank lid and press the grommet firmly and evenly so that the groove in the grommet fits into the tank lid.
9. Carefully bend the capillary tube so that the tube and bulb inside the tank are in a vertical position.
10. Refer to FIG. 5 when reconnecting the wires.
11. Readjust the control thermostat dial as required.

**FIG. 5 THERMOSTAT WIRING**

SERVICE (cont.)**Warmer(s)**

OT: Brew Station & Upper

RT: Left Rear, Left Front, Brew Station, & Right Front

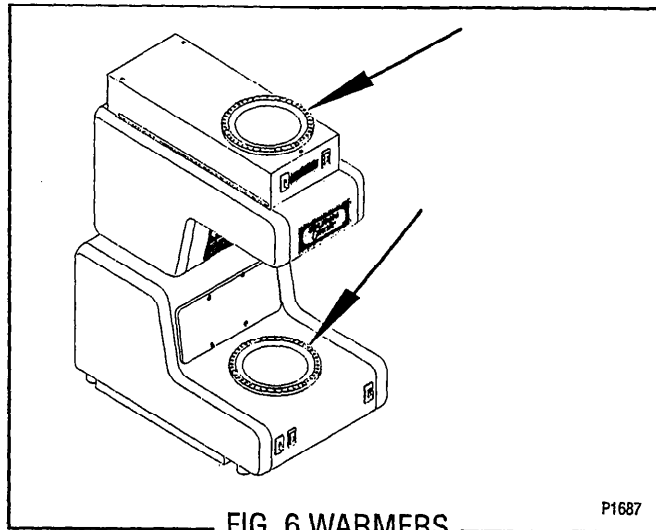


FIG. 6 WARMERS

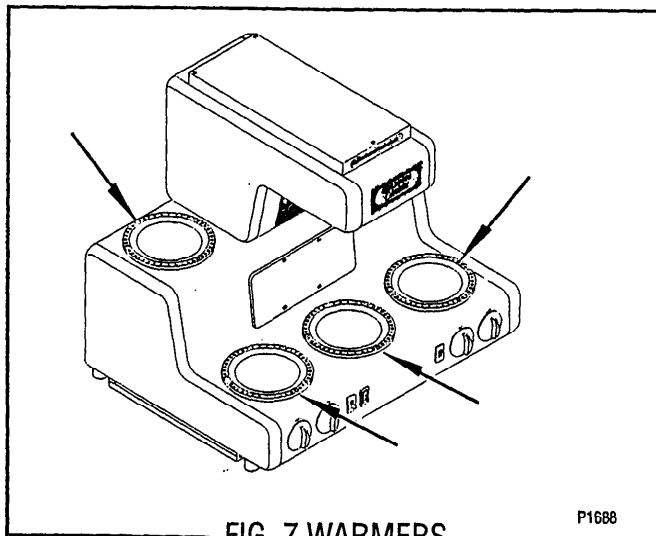


FIG. 7 WARMERS

Location:

OT: One of the warmers is beneath the brew funnel and the other is on the top lid, FIG. 6.

RT: These warmers include the one beneath the brew funnel, the ones on the right and left of the brew station, and the one above and to the left of the brew station as viewed from the front, FIG. 7.

Test Procedure:

1. Once the switch has been tested and switch failure has been eliminated, proceed as follows.
2. Disconnect the brewer from the power source and remove the #4-40 screws attaching the warmer being tested.
3. Lift the warmer assembly from the brewer and invert the warmer making the wire terminals accessible for testing.
4. Check for continuity from the switch to the black wire at the warmer element.

If continuity is present as described, proceed to #5.

5. Check for continuity from the wire terminal of the white or red wire to the splice or indicator lamp using the chart below.

If continuity is present as described, proceed to #6. If continuity is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

6. Check for continuity across the two terminals on the warmer.

If continuity is present as described, the warmer is operating properly.

If continuity is not present as described, replace the warmer.

Removal and Replacement:

1. Remove the #4-40 slotted-head screws holding the warmer to the brewer
2. Lift the warmer assembly from the brewer.
3. Disconnect both wires from the warmer.
4. Refer to FIG. 8 when reconnecting the wires.
5. Place the new warmer into the brewer and securely attach it using the #4-40 screws.

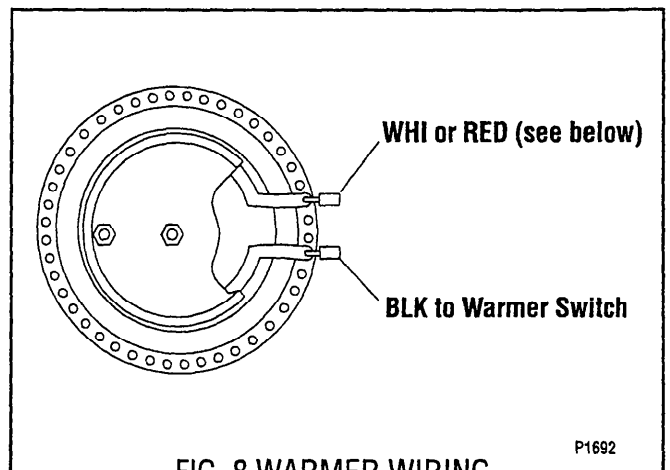


FIG. 8 WARMER WIRING

MODEL

OT Upper	WHI OR RED	to Indicator Lamp
OT Brew Station	WHI OR RED	to Indicator Lamp to Terminal Block
RT Left Rear	WHI OR RED	to Terminal Block to Brew Station Warmer
RT Left Front	WHI OR RED	to Indicator Lamp
RT Brew Station	WHI OR RED	to Timer P2 to Left Rear Warmer
RT Right Front	WHI OR RED	to Right Rear Warmer Switch

Warmer

RT: Right Rear Three Heat

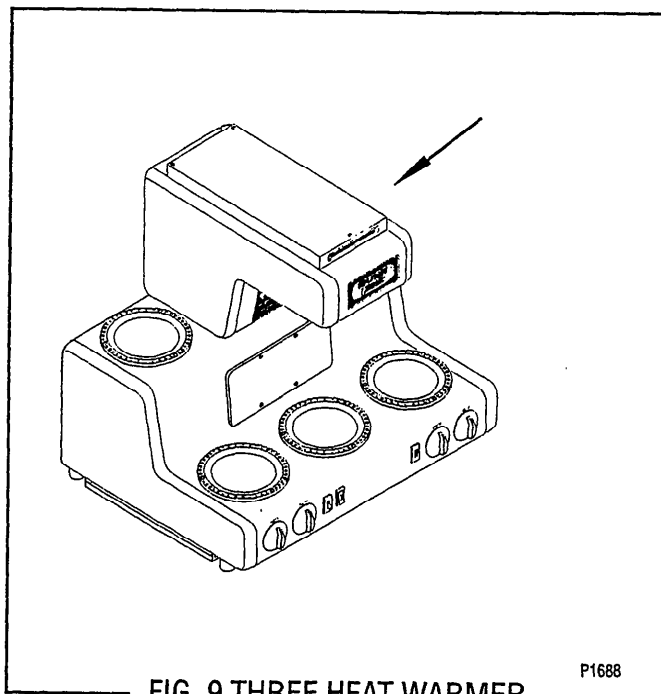


FIG. 9 THREE HEAT WARMER

Location:

The three heat warmer is above and to the right of the brew station as viewed from the front, FIG. 9.

Test Procedure:

1. Once the switch has been tested and switch failure has been eliminated, proceed as follows.
2. Disconnect the brewer from the power source and remove the #4-40 screws attaching the warmer being tested.
3. Lift the warmer assembly from the brewer and invert the warmer making the wire terminals accessible for testing.
4. Check for continuity of the red wire, the white wire, then the brown wire from the switch to the warmer element.

If continuity is present as described, proceed to #5. If continuity is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

5. Check for continuity across the two outside terminals on the warmer. Then across one of the outside terminals and the center terminal. Finally, across the other outside terminal, and the center terminal.

If continuity is present as described, the warmer is operating properly. If continuity is not present as described, replace the warmer.

Removal and Replacement:

1. Remove the #4-40 slotted-head screws holding the warmer to the brewer
2. Lift the warmer assembly from the brewer.
3. Disconnect the wires from the warmer.
4. Refer to FIG. 10 when reconnecting the wires.
5. Place the new warmer into the brewer and securely attach it using the #4-40 screws.

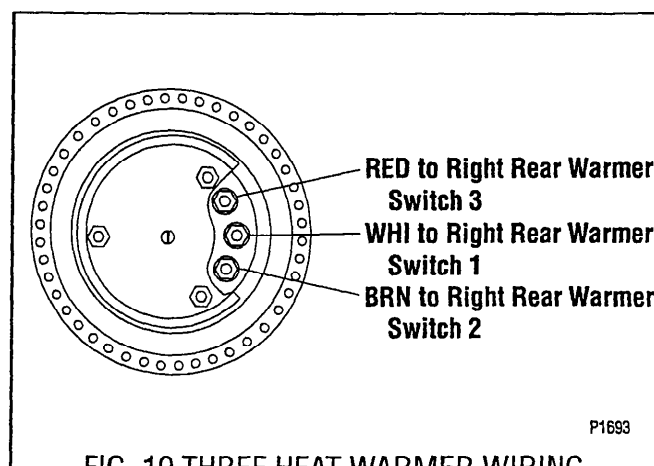


FIG. 10 THREE HEAT WARMER WIRING

SERVICE (cont.)**Warmer Switch(es)**

OT: On/Off Brew Station & Upper

RT: On/Off Brew Station

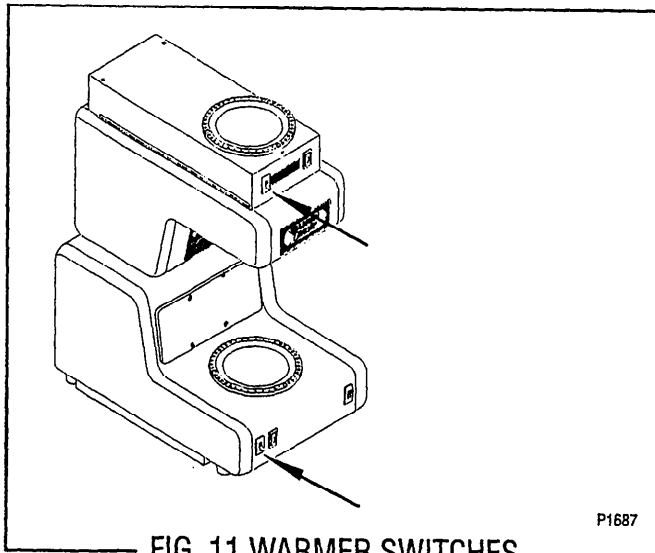


FIG. 11 WARMER SWITCHES

P1687

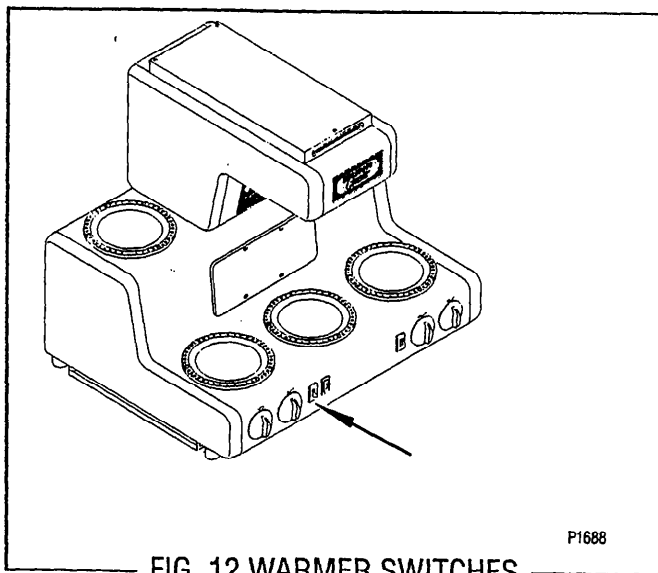


FIG. 12 WARMER SWITCHES

P1688

Location:

These switches are located beneath and to the left of their associated warmers as viewed from the front, FIG.s 11 and 12.

Test Procedure:

1. Locate the switch terminal with black wires that do not go to the nearby indicator lamp.
2. Check the voltage across this terminal and the terminal on the indicator lamp with white or red wires with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4. If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across the other switch terminal and the terminal on the indicator lamp with white or red wires with a voltmeter when the switch is in the upper position. Connect the brewer to the power source. The indication must be as described in step 2. Voltage must not be present across these terminals in the lower position.
5. Disconnect the brewer from the power source.

If voltage is present as described the switch is operating properly.

If voltage is not present as described, replace the switch.

Removal and Replacement:

1. Compress the clips inside the housing and gently push the switch through the opening.
2. Remove the wires from the switch terminals.
3. Refer to FIG. 13 when reconnecting the wires.
4. Push the new switch firmly into the opening.

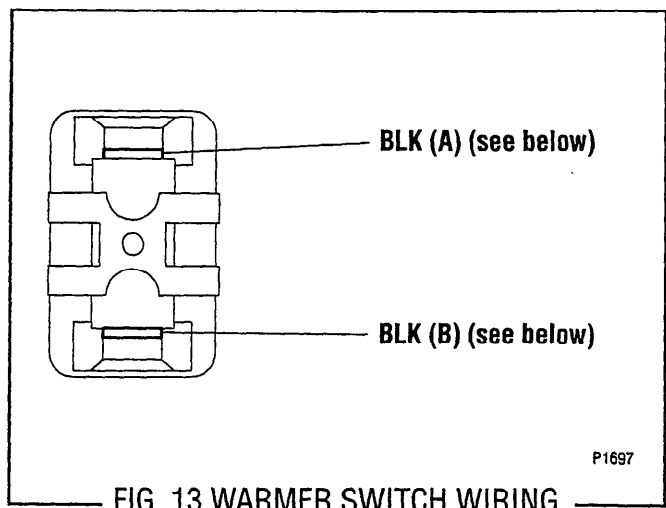


FIG. 13 WARMER SWITCH WIRING

P1697

MODEL

OT Upper

BLK A to Warmer
to Indicator Lamp
BLK B to Harness P3

OT On/Off Brew Station

BLK A to Indicator Lamp
to Brew Station Warmer
to Timer P3
BLK B to Terminal Block

RT On/Off Brew Station

BLK A to Indicator Lamp
to Timer P3
to Brew Station Warmer
BLK B to Left Front Warmer Switch
to Right Front Warmer Switch

SERVICE (cont.)**Warmer Switch(es)**

RT: Left Rear, Left Front, & Right Front

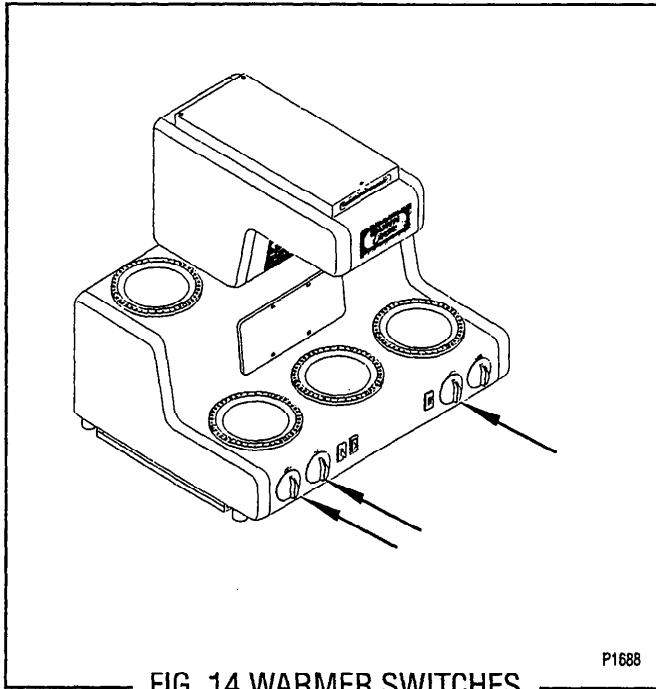


FIG. 14 WARMER SWITCHES

Location:

These warmer switches are the two at the left and the left most one on the right of the base as viewed from the front, FIG. 14. Their knobs are marked Off/On/Off/On.

To test these switches, access will also be needed to the terminal block located in the rear of the brewer.

Test Procedure:

1. Check the voltage across terminal L1 and the white or red wire on the terminal block with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check the voltage across terminal 1 and the white or red wire on the terminal block with a voltmeter when the switch is in the "ON" position. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "OFF" positions.
4. Disconnect the brewer from the power source.

If voltage is present as described, the switch is operating properly.

If voltage is not present as described, replace the switch.

Removal and Replacement:

1. Remove the knob from the switch.
2. Loosen the 5/8" nut on the switch shaft and push the switch through the opening.
3. Remove the wires from the switch terminals.
4. Refer to FIG. 15 when reconnecting the wires.
5. Securely mount the new switch onto the housing and reinstall the knob.

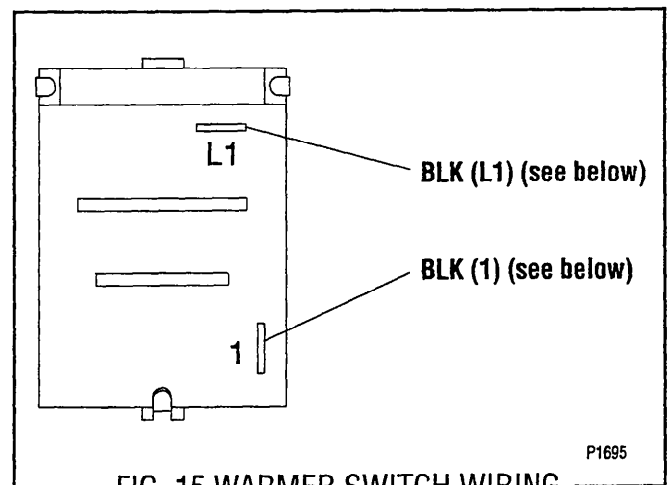


FIG. 15 WARMER SWITCH WIRING

MODEL

RT Left Rear	BLK L1	to Warmer
	BLK 1	to Left Front Warmer Switch
RT Left Front	BLK L1	to Warmer
	BLK 1	to Left Rear Warmer Switch
		to Brew Station Warmer Switch
RT Right Front	BLK L1	to Warmer
	BLK 1	to Terminal Block to Brew Station Warmer Switch

SERVICE (cont.)**Warmer Switch(es)**

RT: Right Rear Three Heat Rotary

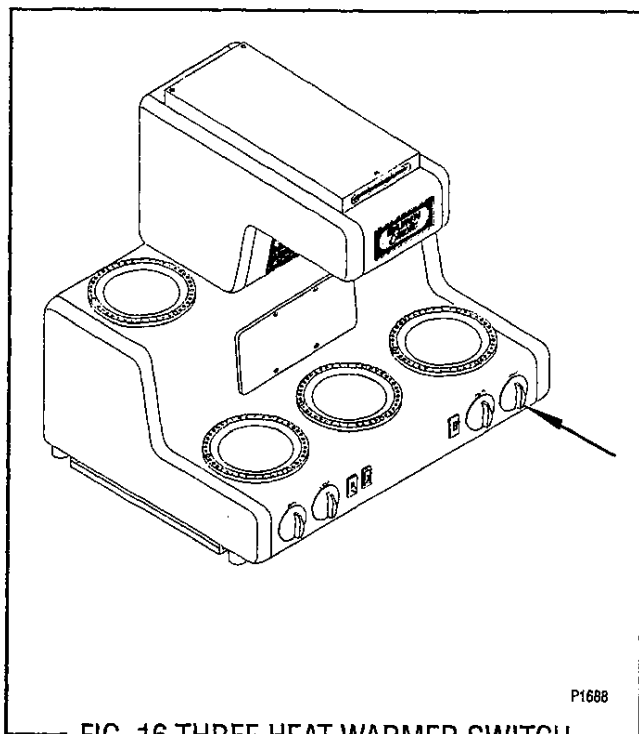


FIG. 16 THREE HEAT WARMER SWITCH

Location:

This switch is the farthest on the right of the base as viewed from the front, FIG. 16. Its knob is marked Off/Low/Med/High.

Test Procedure:

1. Check the voltage across terminals L1 and N with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check the voltage across terminals L1 and 3 with a voltmeter when the switch is in the "Low", "Med", or "High" positions. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "Off" position.
4. Disconnect the brewer from the power source.

5. Check the voltage across terminals L1 and 2 with a voltmeter when the switch is in the "High" position. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "Off", "Low", or "Med" positions.
6. Disconnect the brewer from the power source.
7. Check the voltage across terminals N and 1 with a voltmeter when the switch is in the "Med" or "High" positions. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "Off" or "Low" positions.
8. Disconnect the brewer from the power source.
9. Check the voltage across terminals N and 2 with a voltmeter when the switch is in the "Low" position. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "Off", "Med", or "High" positions.
10. Disconnect the brewer from the power source.

If voltage is present as described, the switch is operating properly.

If voltage is not present as described, replace the switch.

Removal and Replacement:

1. Remove the knob from the switch.
2. Loosen the 5/8" nut on the switch shaft and push the switch through the opening.
3. Remove the wires from the switch terminals.
4. Refer to FIG. 17 when reconnecting the wires.
5. Securely mount the new switch onto the housing and reinstall the knob.

NOTE: Switch must be installed right side up.

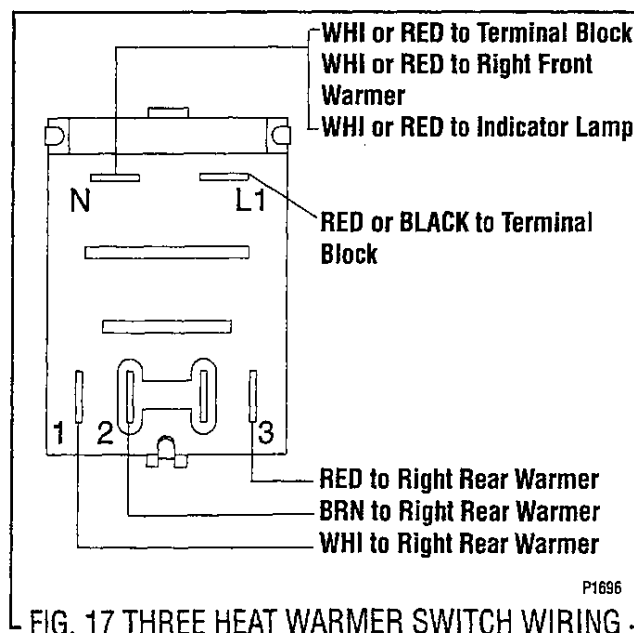


FIG. 17 THREE HEAT WARMER SWITCH WIRING

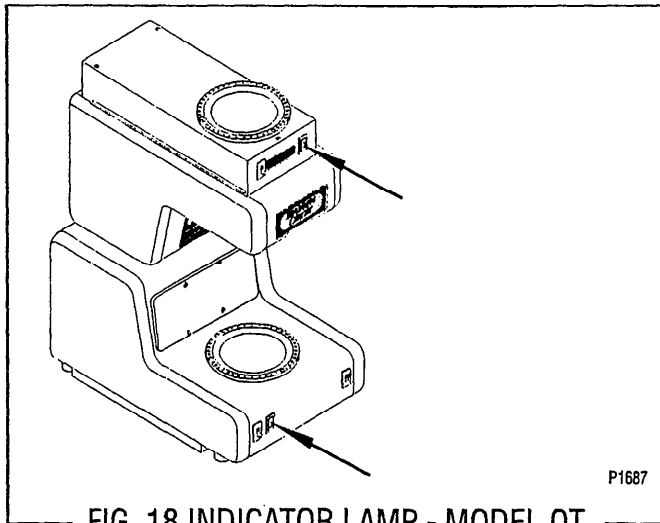
SERVICE (cont.)**Indicator Lamp(s)**

FIG. 18 INDICATOR LAMP - MODEL OT

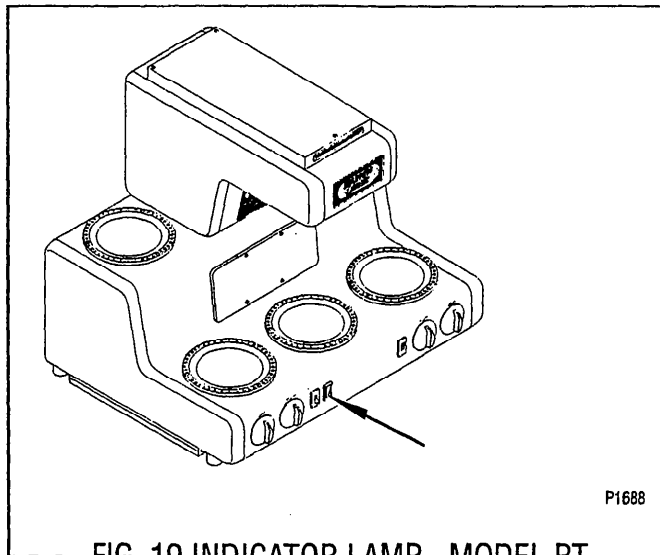


FIG. 19 INDICATOR LAMP - MODEL RT

Location:

The indicator lamps are located beneath their associated warmers, FIG.s 18 and 19.

Test Procedure:

1. Check continuity of the black wire from the switch to the indicator lamp.
2. Check continuity of the white or red wire from the indicator lamp to the terminal block.

If continuity is present, proceed to #3.
If continuity is not present, refer to Wiring Diagrams and check brewer wiring harness.

3. Check for voltage across the indicator lamp terminals. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.

c) 100 volts ac for two wire 100 volt models.

4. Disconnect the brewer from the power source.

If voltage is present, the indicator lamp is operating properly.

If voltage is not present, replace the indicator lamp.

Removal and Replacement:

1. Compress the clips inside the housing and gently push the indicator lamp through the opening.
2. Remove the wires from the indicator lamp terminals.
3. Refer to FIG. 20 when reconnecting the wires.
4. Push the new indicator lamp firmly into the opening.

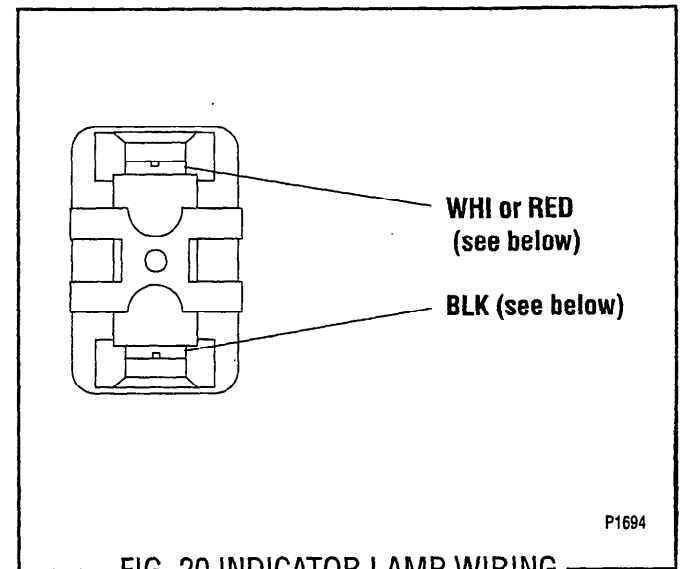
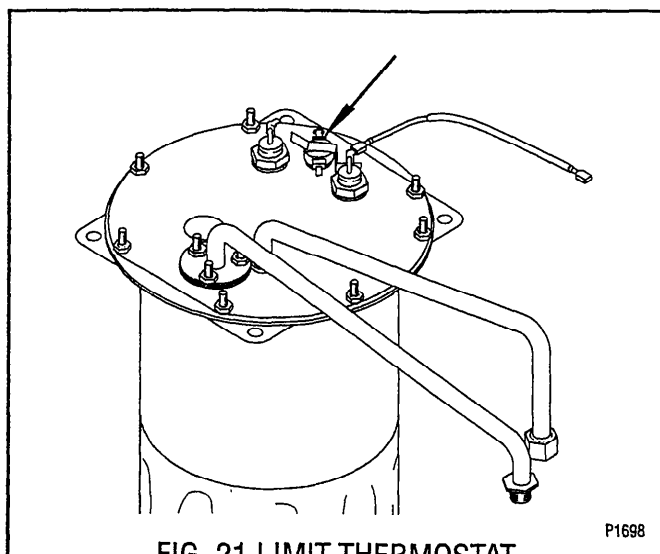


FIG. 20 INDICATOR LAMP WIRING

MODEL OT Upper	BLK	to Warmer Switch
	WHI or RED	to Warmer to Harness P2
OT Lower	BLK	to Start Switch to On/Off Brew Station Warmer Switch
	WHI or RED	to Timer P2 to Brew Station Warmer
RT	BLK	to Start Switch to On/Off Brew Station Warmer Switch
	WHI or RED	to Right Rear Warmer Switch to Left Front Warmer

SERVICE (cont.)**Limit Thermostat****FIG. 21 LIMIT THERMOSTAT****Location:**

The limit thermostat is located on the tank lid between the tank heater terminals, FIG. 21.

Test Procedure:

1. Disconnect the brewer from the power source.
2. Check voltage across the black wire from the limit thermostat and the white or red wire on the tank heater terminal. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

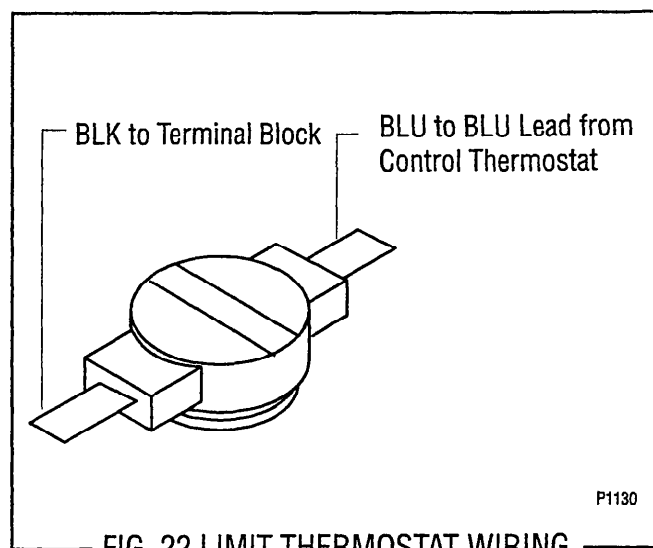
4. Check for continuity across the limit thermostat terminals.

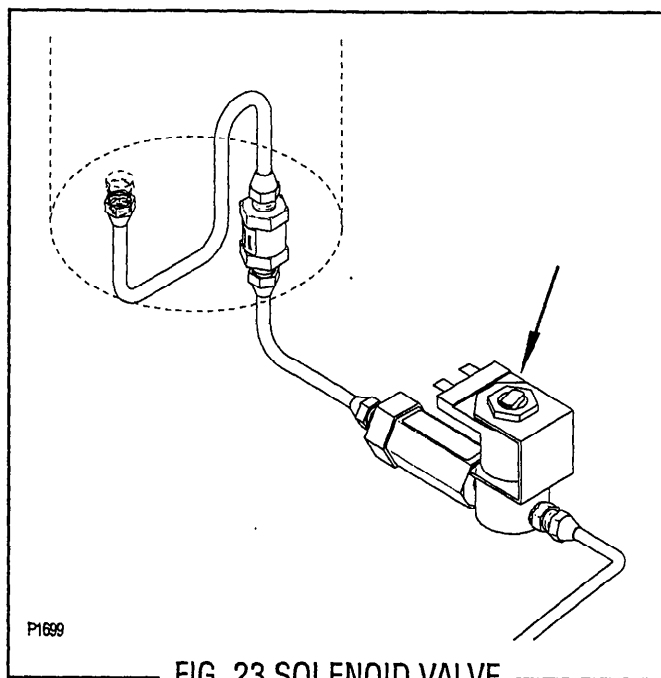
If continuity is present as described, the limit thermostat is operating properly.

If continuity is not present as described, replace the limit thermostat.

Removal and Replacement:

1. Remove both wires from the limit thermostat terminals.
2. Carefully slide the limit thermostat out from under the retaining clip.
3. Carefully slide the new limit thermostat into the retaining clip.
4. Refer to FIG. 22 when reconnecting the wires.

**FIG. 22 LIMIT THERMOSTAT WIRING**

SERVICE (cont.)**Solenoid Valve****FIG. 23 SOLENOID VALVE****Location:**

The solenoid valve is located below and to the left of the tank as viewed from the rear, FIG. 23.

Test Procedure:

1. Check the voltage across the white and black wires with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and released. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models and three wire 120/240 volt models,
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models,
 - c) 100 volts ac for two wire 100 volt models, for the approximate setting on the brew timer dial and then return to zero.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check for continuity across the solenoid valve coil terminals.

If continuity is present as described, reconnect the white and black wires and proceed to #4.

If continuity is not present as described, replace the solenoid valve.

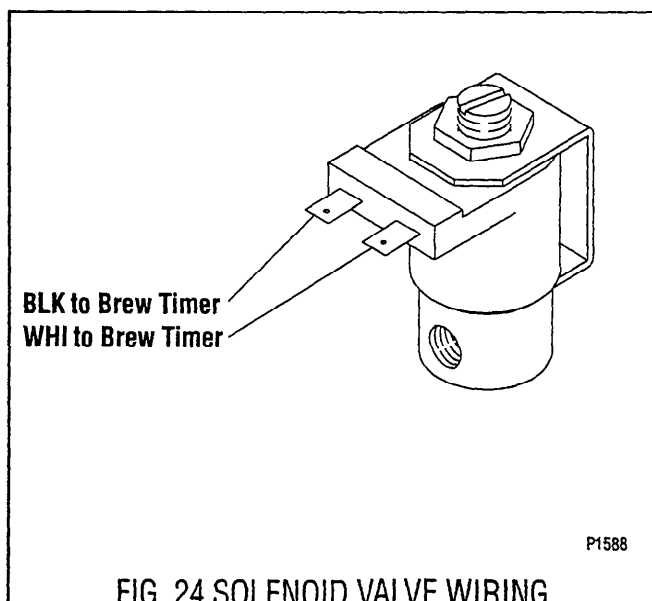
4. Check the solenoid valve for coil action. Connect the brewer to the power source, place the On/Off brew station warmer switch in the upper position, press and release the start switch. Listen carefully in the vicinity of the solenoid valve for a "clicking" sound as the coil magnet attracts and after the approximate setting on the brew timer dial, repels the plunger.
5. Disconnect the brewer from the power source.

If the sound is heard as described and water will not pass through the solenoid valve, there may be a blockage in the water line before or after the solenoid valve or, the solenoid valve may require inspection for wear, and removal of waterborne particles.

If the sound is not heard as described, replace the solenoid valve.

Removal and Replacement:

1. Remove all wires from the solenoid valve coil.
2. Turn off the water supply to the brewer.
3. Remove the bottom pan attached with one or more 8-32 slotted-head screw(s) beneath the front of the brewer.
4. Raise the brewer approximately six inches from the counter top and support the feet on something sturdy.
5. Disconnect the water lines to and from the solenoid valve.
6. Remove the two 10-32 screws holding the solenoid valve to the bracket.
7. Lift-out the solenoid valve.
8. Securely install the new solenoid valve to the bracket. Check the direction of flow arrow on the valve. It must be pointing toward the flow control.
9. Securely fasten the water lines to and from the solenoid valve.
10. Refer to FIG. 24 when reconnecting the wires.

**FIG. 24 SOLENOID VALVE WIRING**

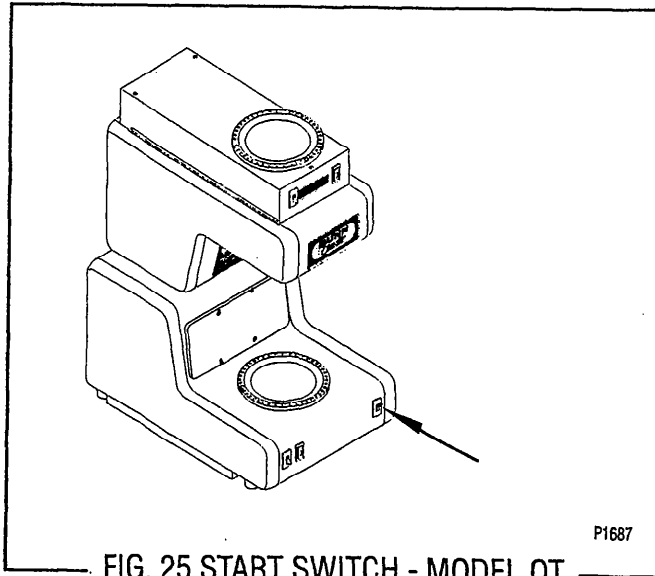
SERVICE (cont.)**Start Switch**

FIG. 25 START SWITCH - MODEL OT

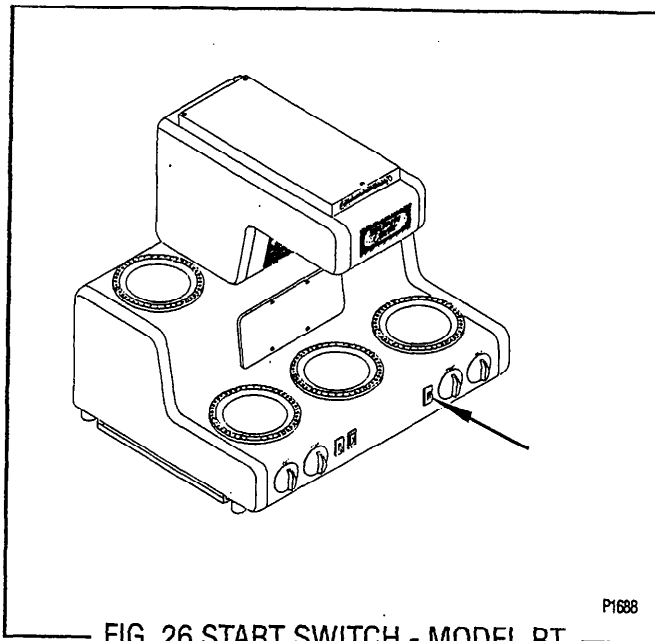


FIG. 26 START SWITCH - MODEL RT

Location:

The start switch is located in the base, below and to the right of the brew station, FIG.s 25 & 26.

Test Procedure:

1. Disconnect the brewer from the power source and remove the wires from both terminals of the start switch.
2. Check for continuity across the two terminals on the switch when it is held in the lower position. Continuity must not be present across these terminals in the upper position.

If continuity is present as described, reconnect the wires, the switch is operating properly.

If continuity is not present as described, replace the switch.

Removal and Replacement:

1. Remove all wires from the switch terminals.
2. Compress the clips inside the housing and gently push the switch through the opening.
3. Push the new switch into the opening and spread the clips to hold the switch captive in the housing.
4. Refer to FIG. 27 when reconnecting the wires.

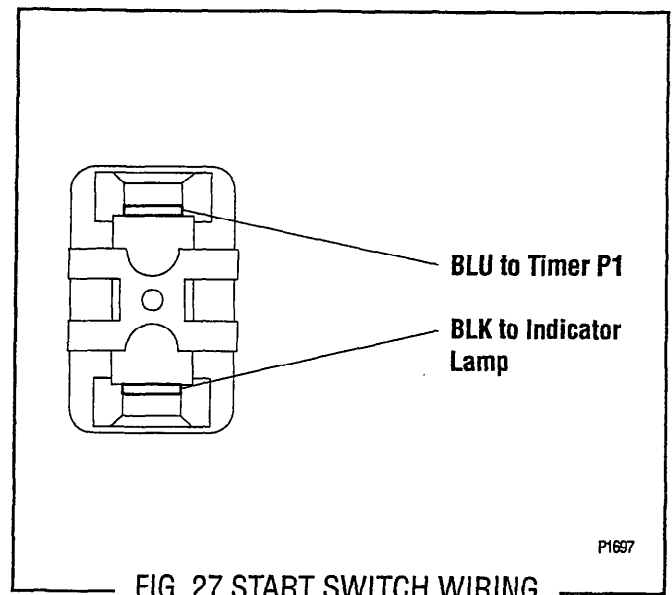
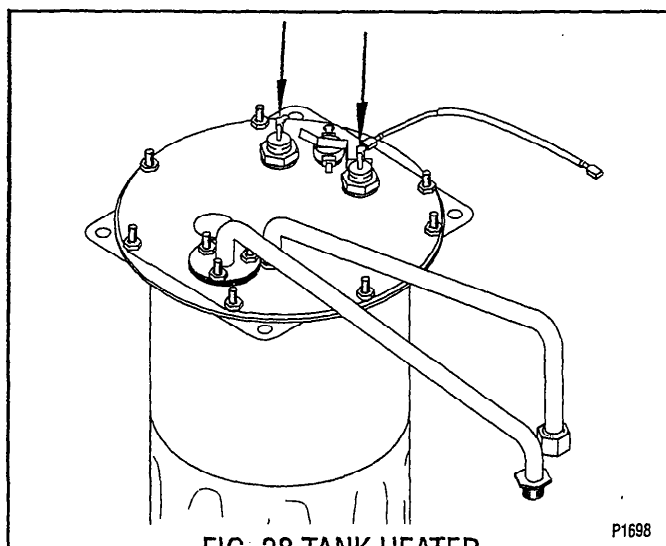


FIG. 27 START SWITCH WIRING

SERVICE (cont.)**Tank Heater****FIG. 28 TANK HEATER****Location:**

The tank heater is located on the tank lid, FIG. 28.

Test Procedure:

1. Check the voltage across the black and white or red wires on the tank heater with a voltmeter when the control thermostat is turned "ON" (fully clockwise). Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check for continuity across the terminals of the tank heater.

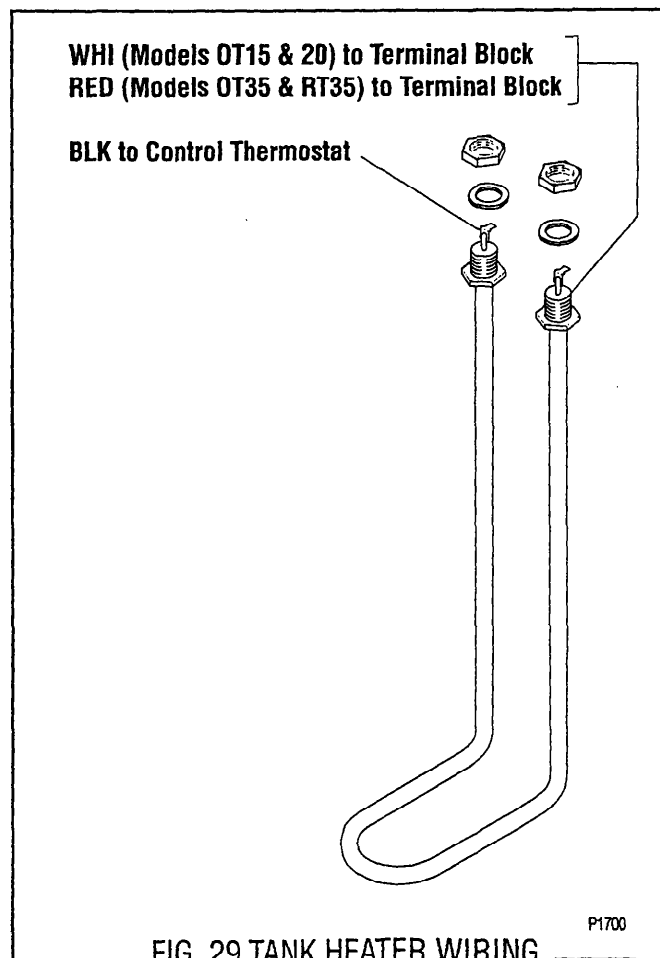
If continuity is present as described, reconnect the wires, the tank heater is operating properly.

If continuity is not present as described, replace the tank heater.

NOTE - If the tank heater remains unable to heat, remove and inspect the heater for cracks in the sheath.

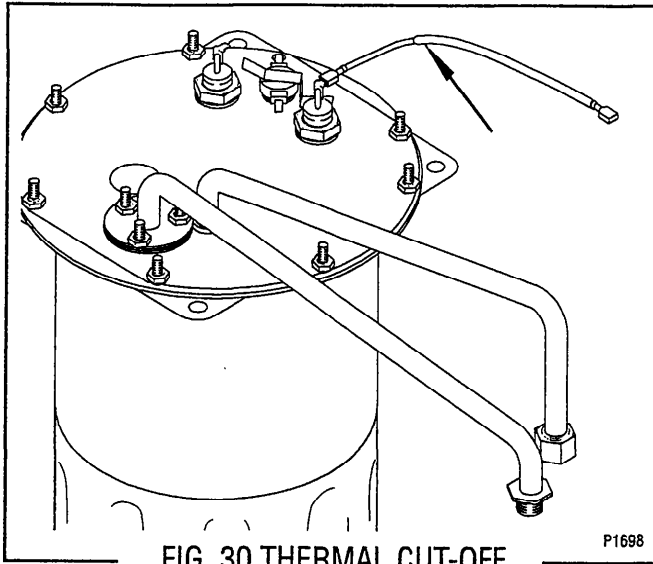
Removal and Replacement:

1. Remove the wires to the tank heater and limit thermostat terminals.
2. Gently pull the thermostat tube with grommet out of the tank lid.
3. Remove the sprayhead and sprayhead nut from the panel on the bottom of the hood.
4. Disconnect the air vent tube from the fitting above the sprayhead panel.
5. On units with faucet, disconnect the inlet and outlet tubes from the faucet coil fittings.
6. Loosen the eight 8-32 nuts on the tank lid and remove the tank lid.
7. Remove the two nuts from the tank heater fittings.
8. Remove the tank heater.
9. Install the new tank heater with new sealing washers on the underside of the tank lid.
10. Securely tighten the nuts to be certain of a watertight seal.
11. Reinstall the tank lid and tighten the eight nuts.
12. Reconnect the air vent tube to the fitting above the sprayhead panel.
13. Reconnect the inlet and outlet tubes to the faucet coil fittings on units with faucet.
14. Reinstall the sprayhead tube nut and sprayhead.
15. Reinstall the thermostat into the tank lid.
16. Refer to FIG. 29 when reconnecting the wires.

**FIG. 29 TANK HEATER WIRING**

SERVICE (cont.)**Thermal Cut-off****Location:**

The thermal cut-off is located on the tank heater, FIG. 30.

**Test Procedures:**

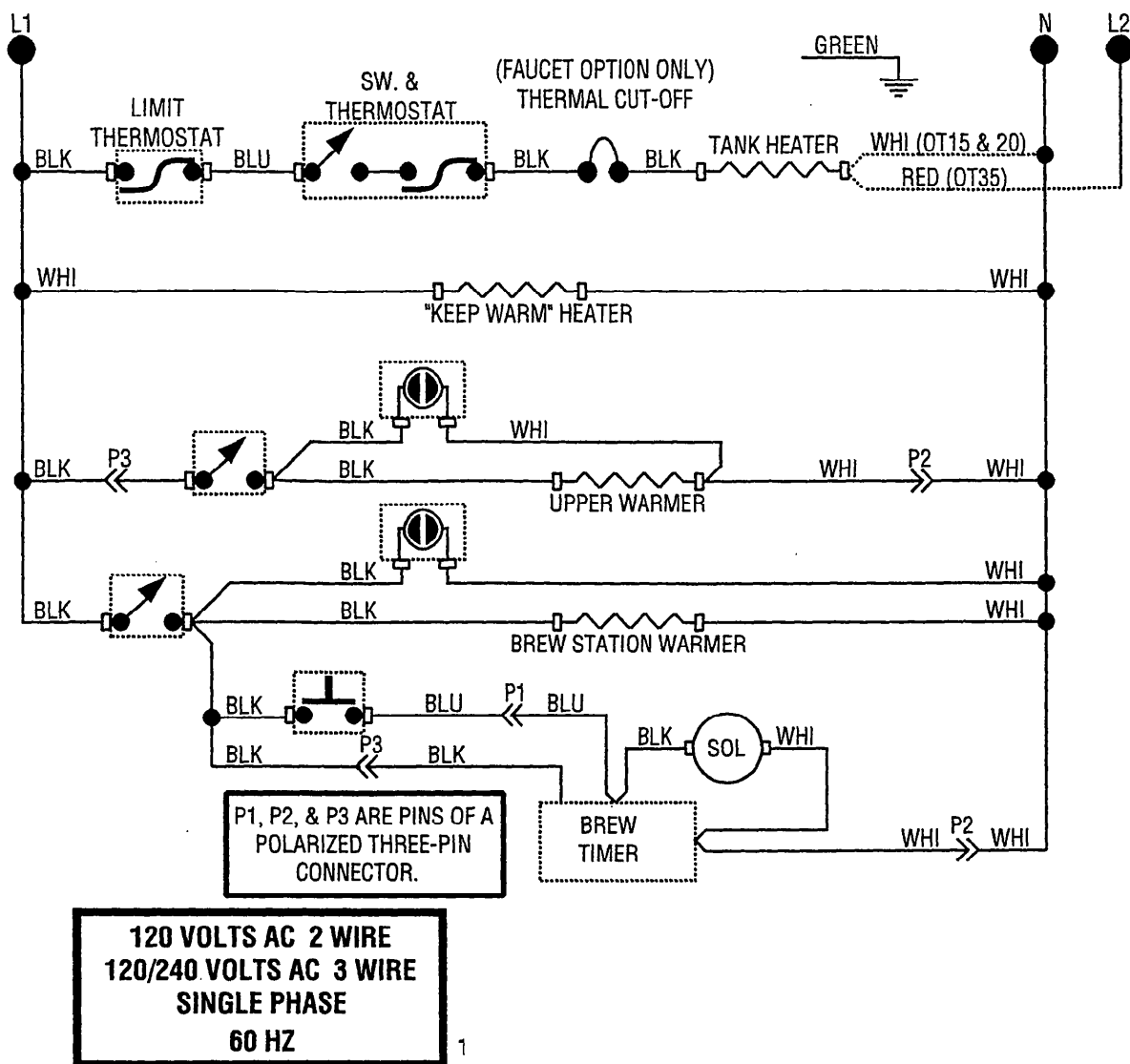
1. Disconnect the brewer from the power source.
2. Disconnect the thermal cut-off from the tank heater terminal and the wiring harness.
3. Check for continuity across the thermal cut-off terminals using an ohmmeter.

If continuity is present, the thermal cut-off is operating properly. If continuity is not present as described, replace the thermal cut-off.

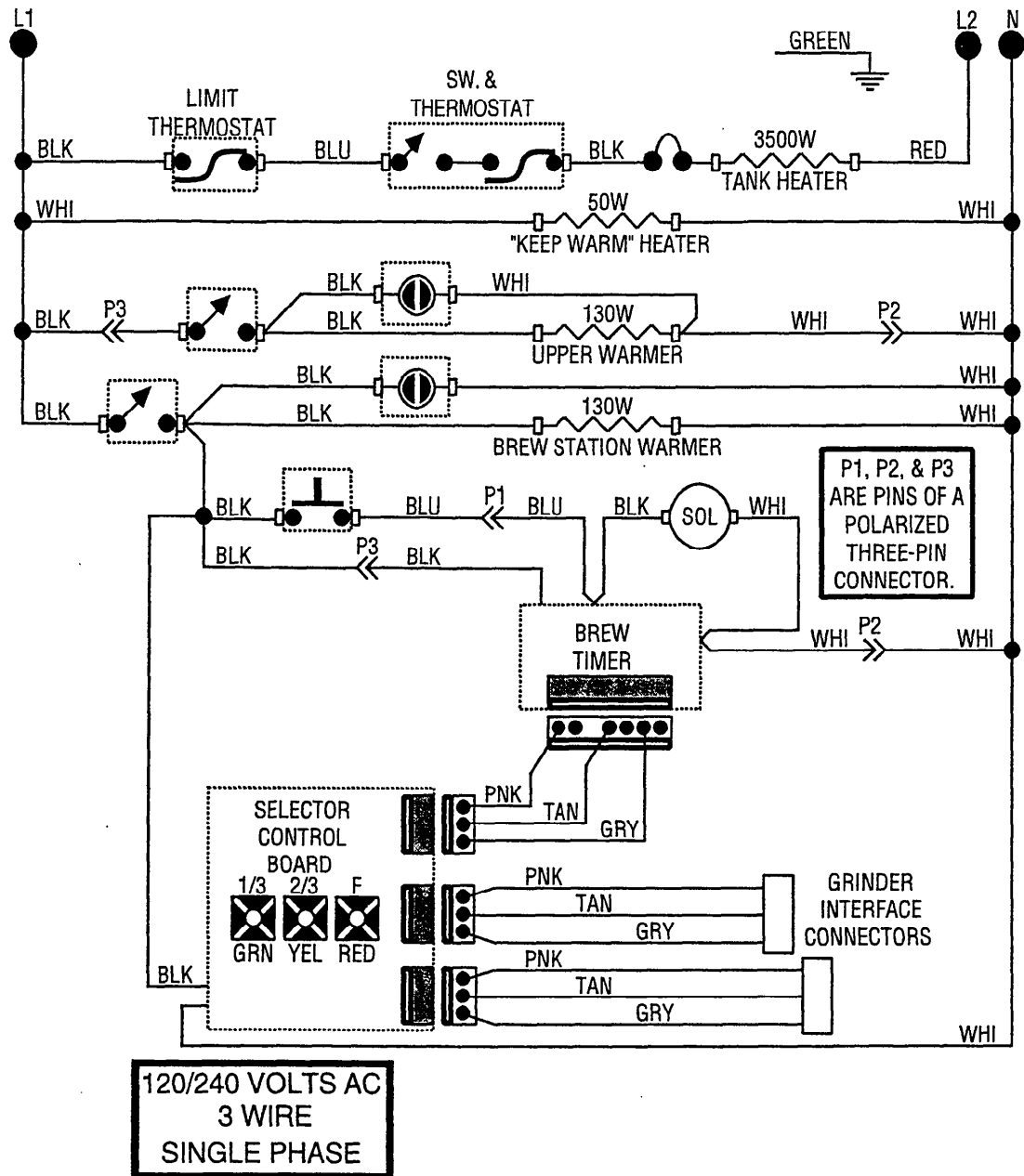
Removal and Replacement:

1. Disconnect the thermal cut-off from the tank heater terminal and the wiring harness.
2. Remove thermal cut-off and discard.
3. Connect new thermal cut-off to the tank heater terminal and the wiring harness.
4. Refer to FIG. 30 when reconnecting wires.

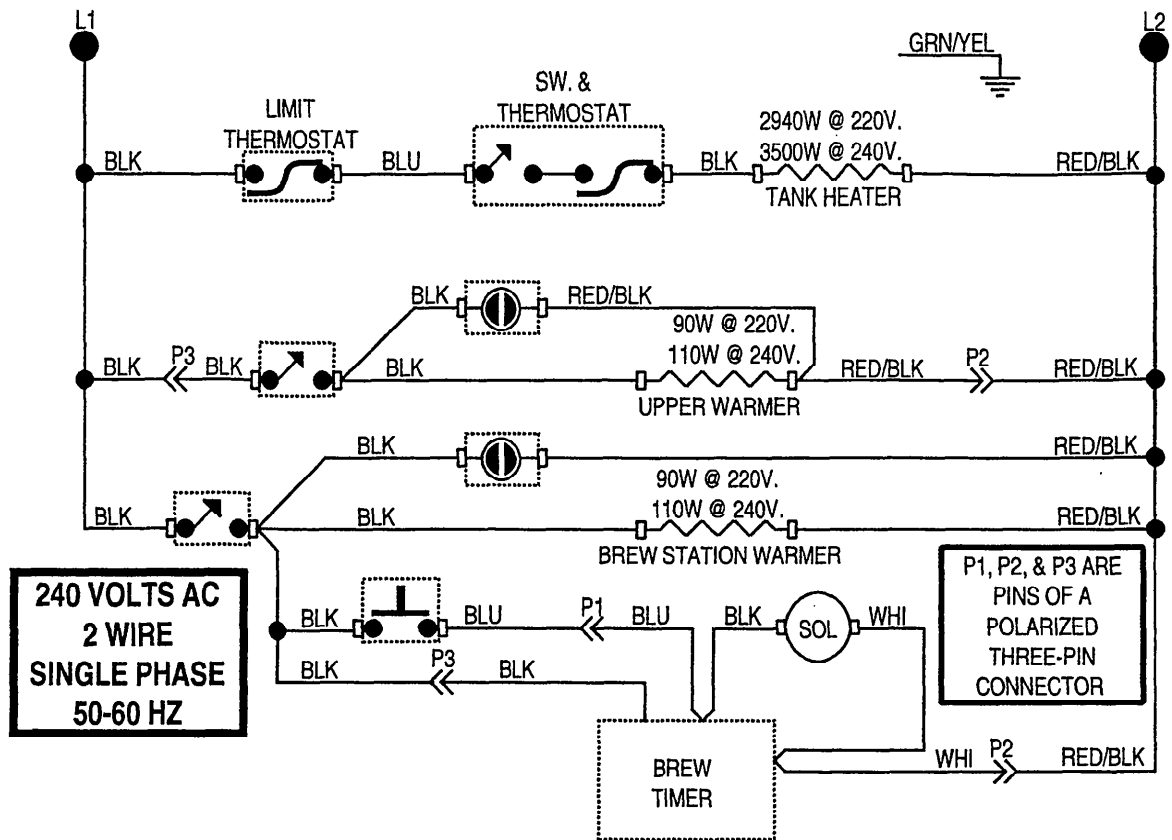
SCHEMATIC WIRING DIAGRAM OT



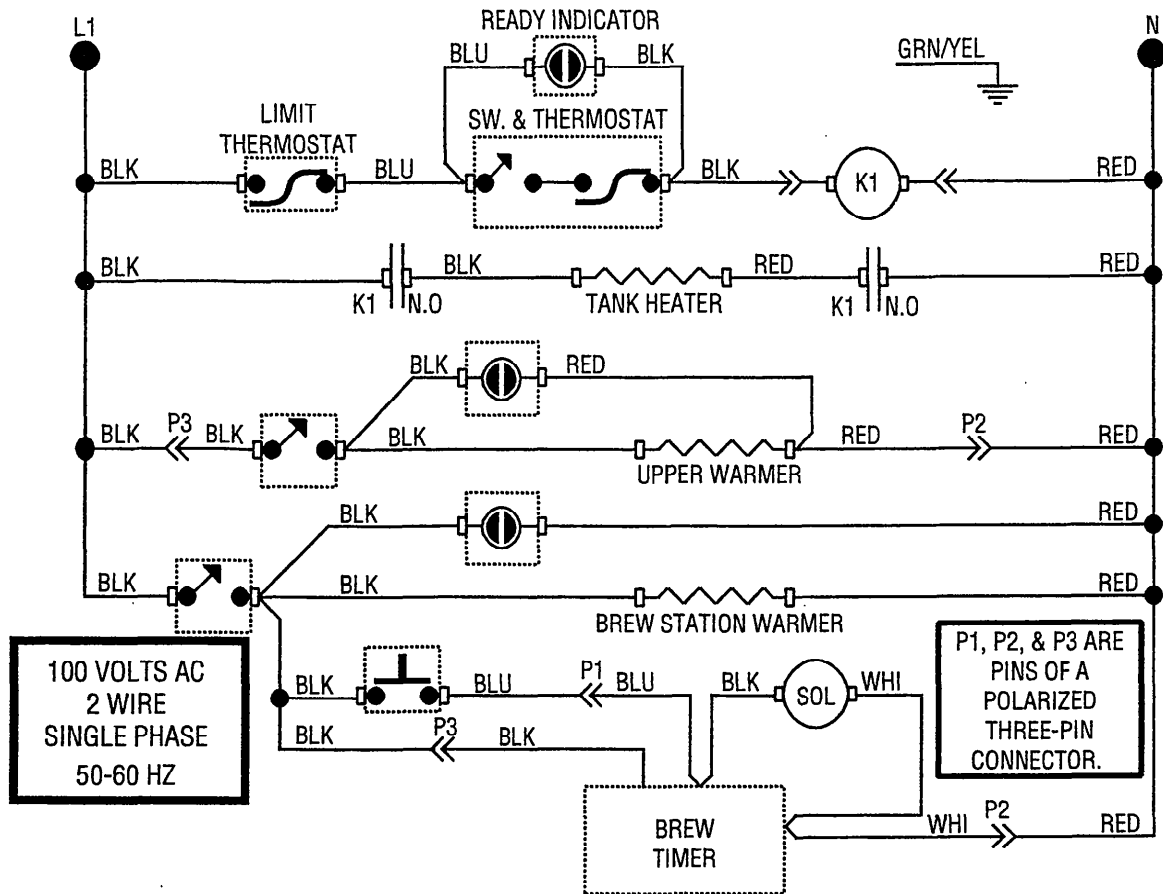
SCHEMATIC WIRING DIAGRAM OT



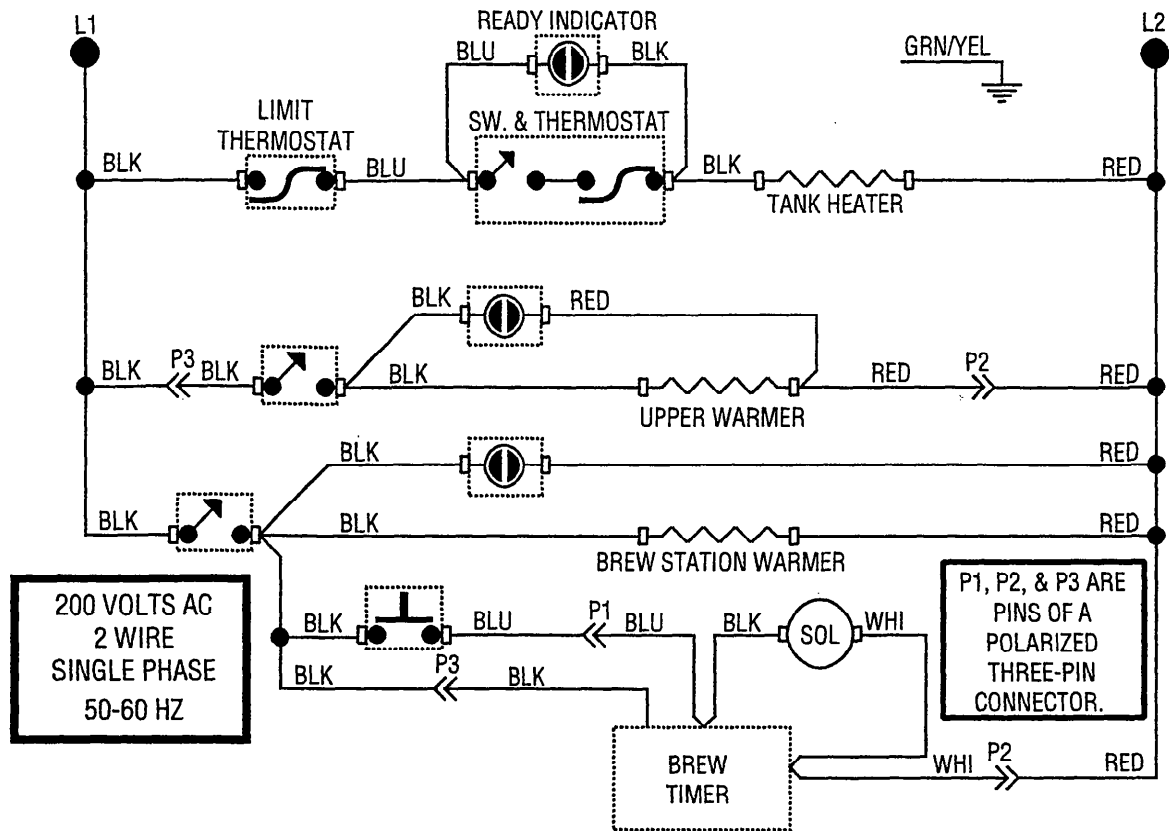
SCHEMATIC WIRING DIAGRAM OTA



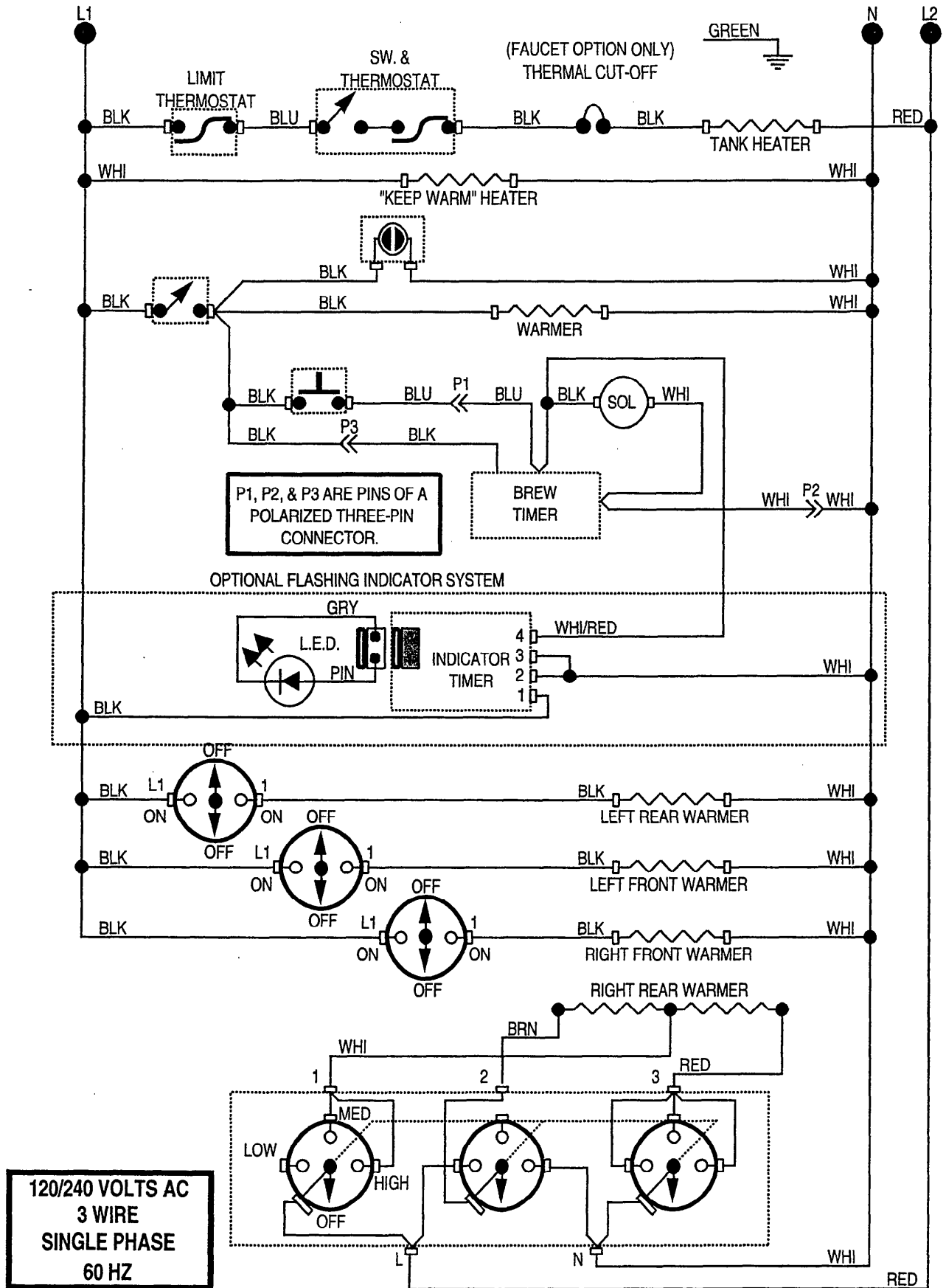
SCHEMATIC WIRING DIAGRAM OT25B



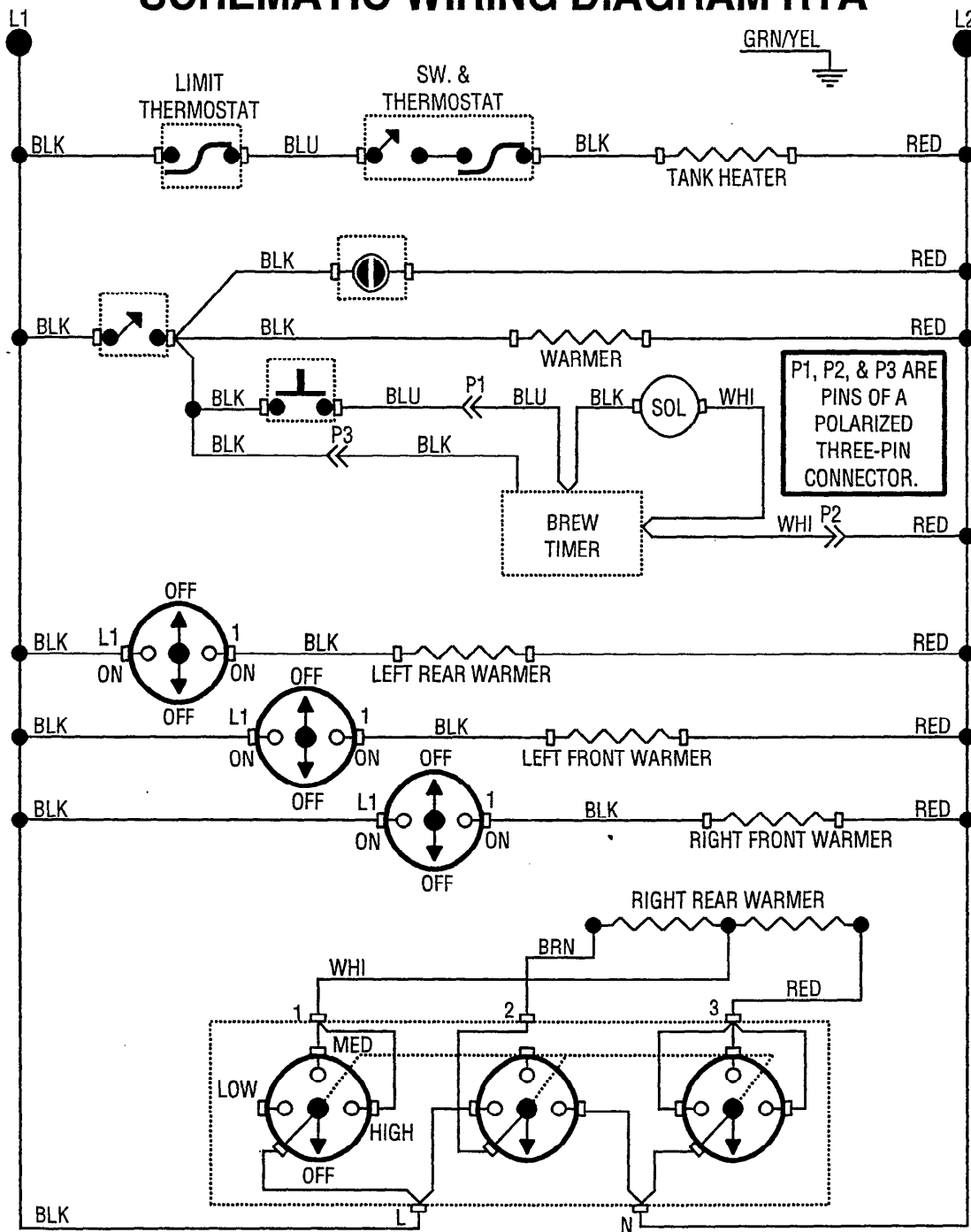
SCHEMATIC WIRING DIAGRAM OT35B



SCHEMATIC WIRING DIAGRAM RT

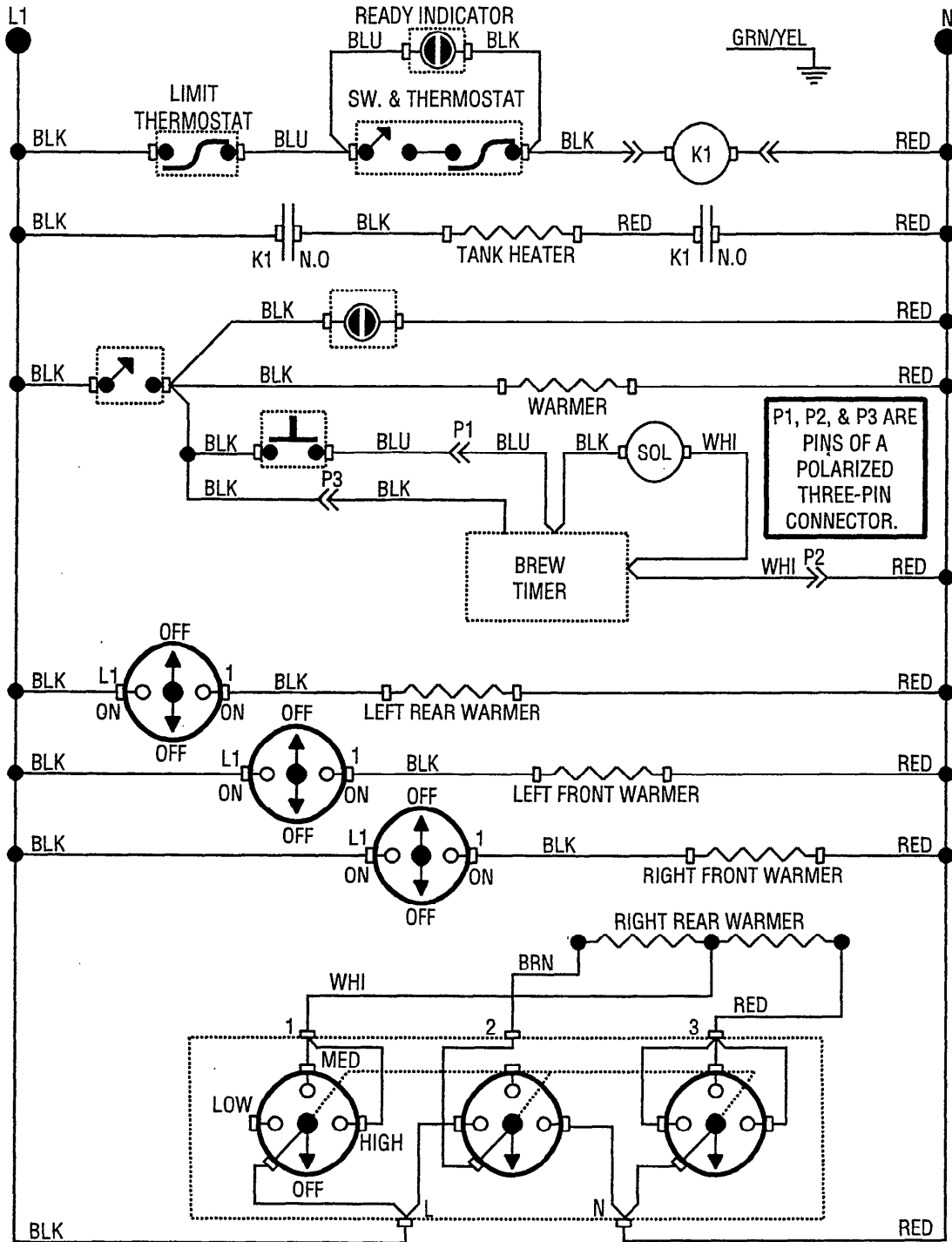


SCHEMATIC WIRING DIAGRAM RTA



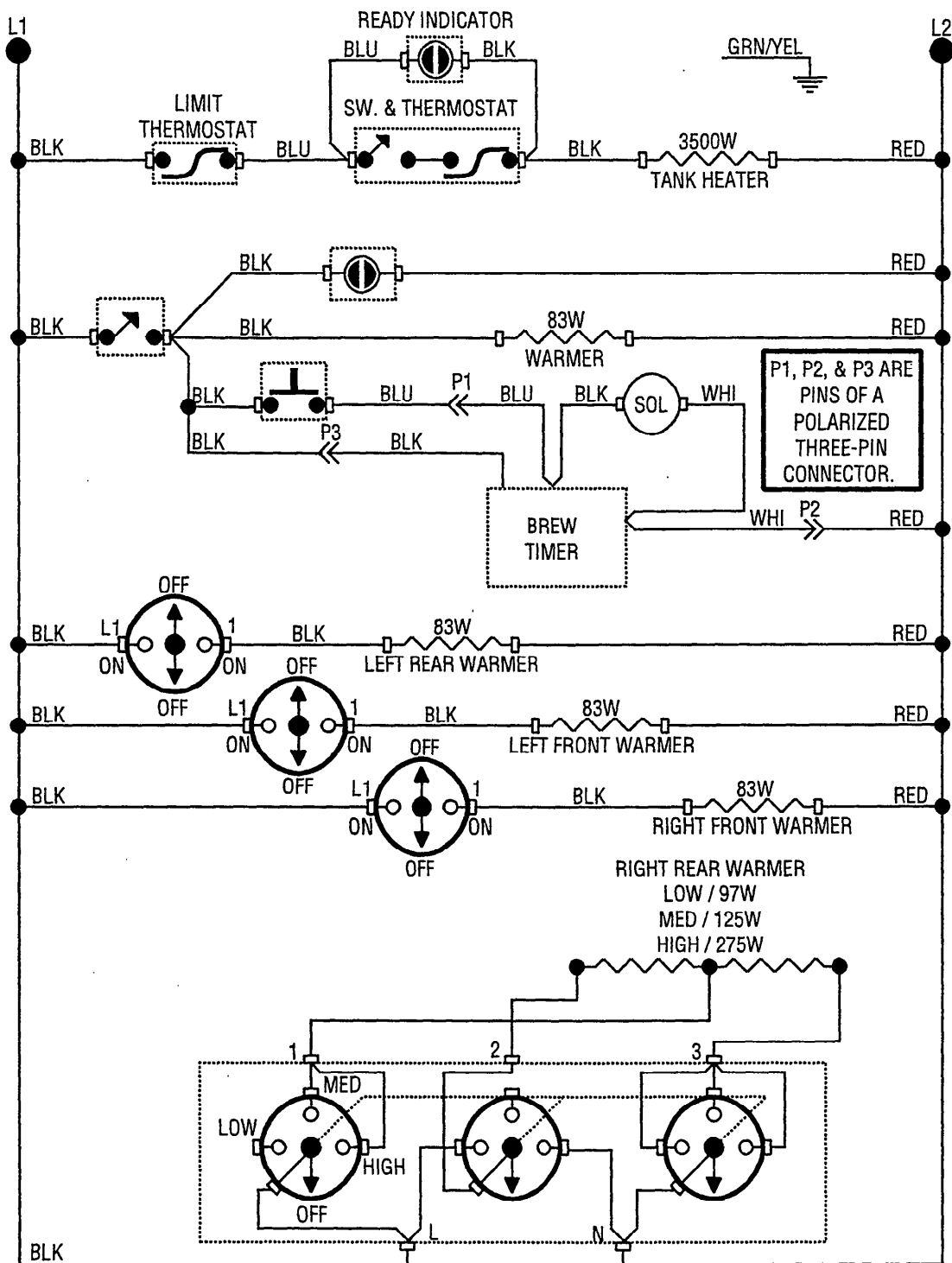
**240 VOLTS AC
2 WIRE
SINGLE PHASE
50-60 HZ**

SCHEMATIC WIRING DIAGRAM RT25B

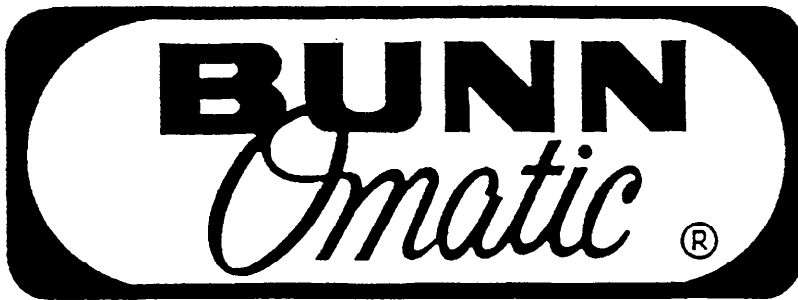


100 VOLTS AC
2 WIRE
SINGLE PHASE
50-60 HZ

SCHEMATIC WIRING DIAGRAM RT35B



200 VOLTS AC
2 WIRE
SINGLE PHASE
50-60 HZ



COFFEE BREWER MODEL RT-XXX/RT20

Supplement to RT/OT
Operating & Service Manual # 10021

ELECTRICAL REQUIREMENTS

This brewer requires 2-wire, grounded service rated 120 volts ac, 25 amp, single phase, 50-60 Hz. 2925 total watts.

Substitute 120 volts ac for all references to 240 volts ac used in the Operating & Service Manual.

The equipment is wired the same as the standard model RT, except.

- a) The red wire from the tank heater is connected to the white leg of the terminal block.
- b) The red wire from the high heat warmer switch is connected to black leg of the terminal block.

REPLACEMENT PARTS

Substitute the following parts for those used in the Operating & Service Manual.

<u>PART #</u>	<u>DESCRIPTION</u>
4636 Tank Heater (instead of # 4637)

BUNN-O-MATIC CORPORATION

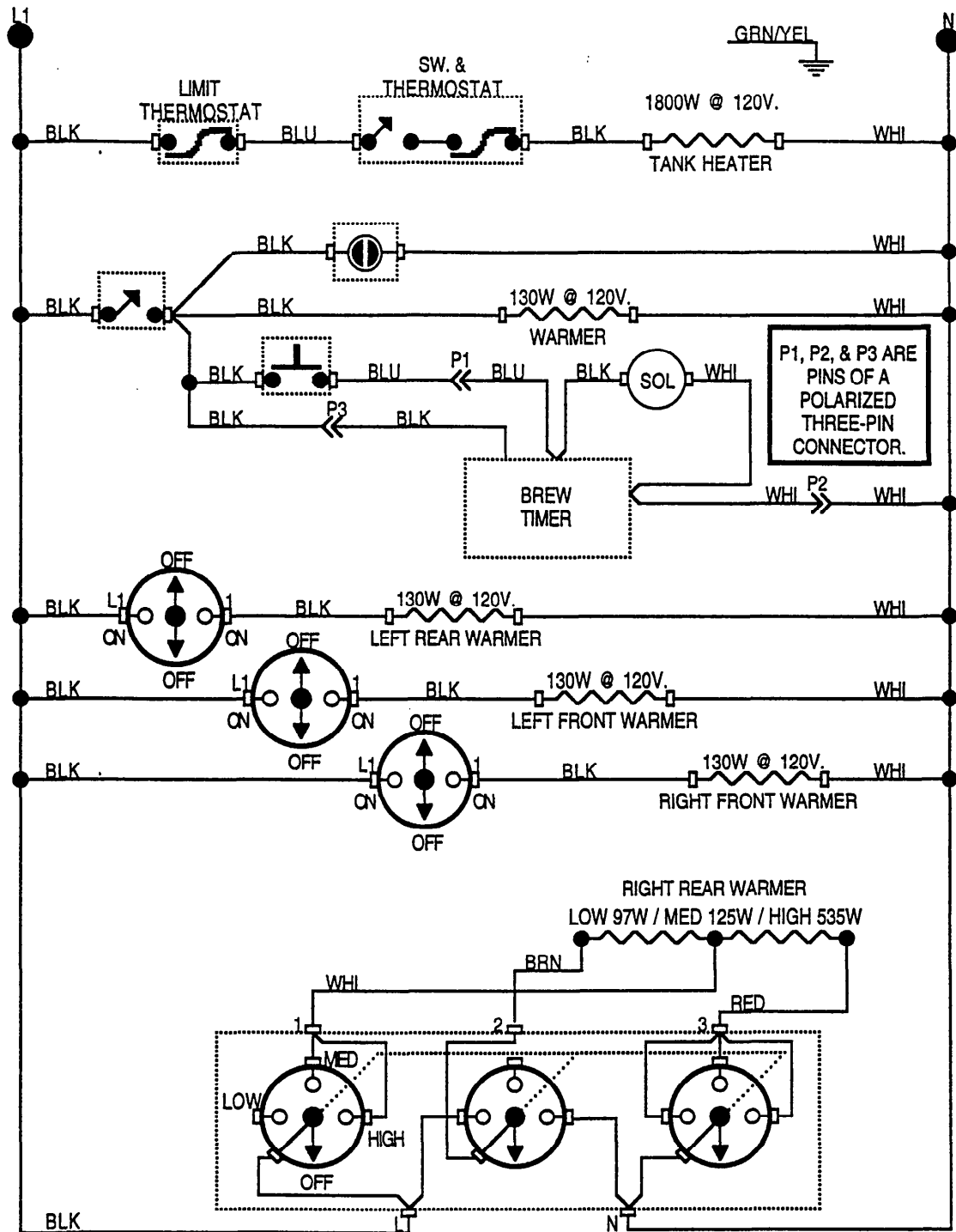
POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS USA 62708-3227

TELEPHONE: (217) 529-6601 FAX: (217) 529-6644

TELEX: 755371 CABLE: BUNNOMATIC

SCHEMATIC WIRING DIAGRAM RT 20

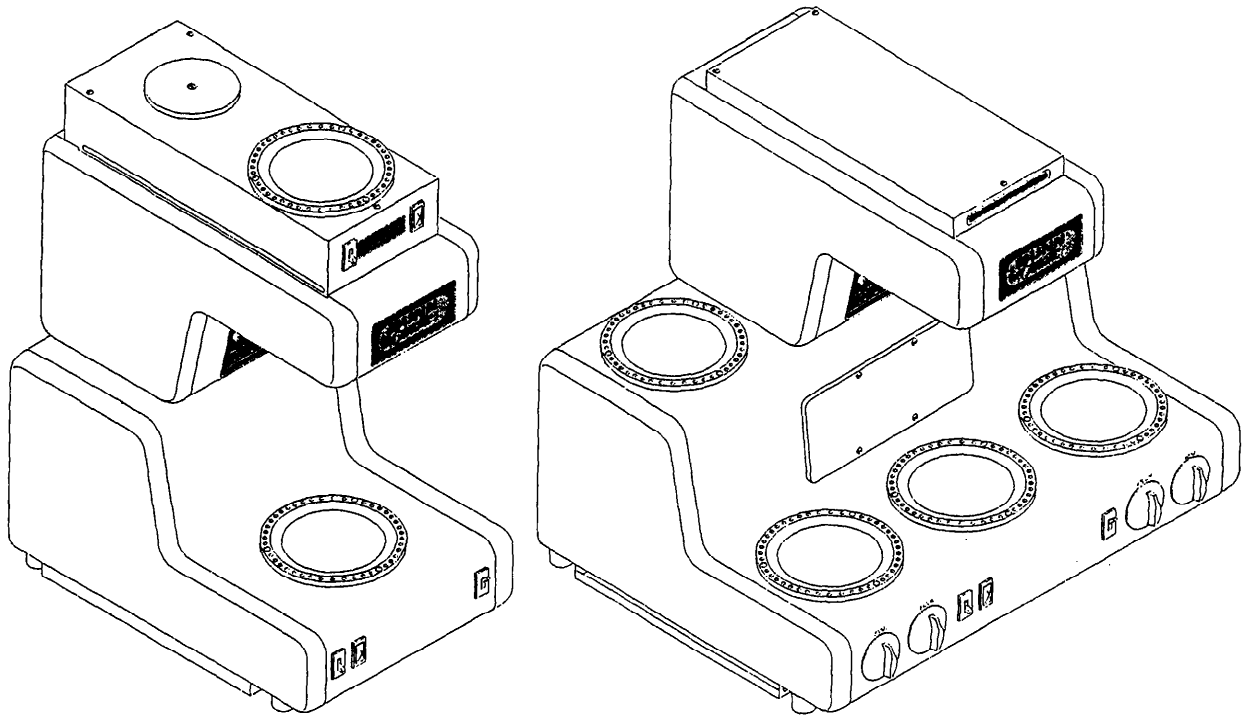


**120 VOLTS AC
2 WIRE
SINGLE PHASE
60 HZ**

©1994 BUNN-O-MATIC CORPORATION

BUNN®

OL, RL
OT, RT



ILLUSTRATED PARTS CATALOG

Designs, materials, weights, specifications, and dimensions for equipment or replacement parts are subject to change without notice.

BUNN-O-MATIC CORPORATION

POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS 62708-3227

PHONE: (217) 529-6601 FAX: (217) 529-6644

WARRANTY

Bunn-O-Matic Corp. ("Bunn") warrants the equipment manufactured by it to be commercially free from defects in material and workmanship existing at the time of manufacture and appearing within one year from the date of installation. In addition:

1.) Bunn warrants electronic circuit and/or control boards to be commercially free from defects in material and workmanship for two years from the date of installation.

2.) Bunn warrants the compressor on refrigeration equipment to be commercially free from defects in material and workmanship for two years from the date of installation.

3.) Bunn warrants that the grinding burrs on coffee grinding equipment will grind coffee to meet original factory screen sieve analysis for three years from date of installation or for 30,000 pounds of coffee, whichever comes first.

This warranty does not apply to any equipment, component or part that was not manufactured by Bunn or that, in Bunn's judgement, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty.

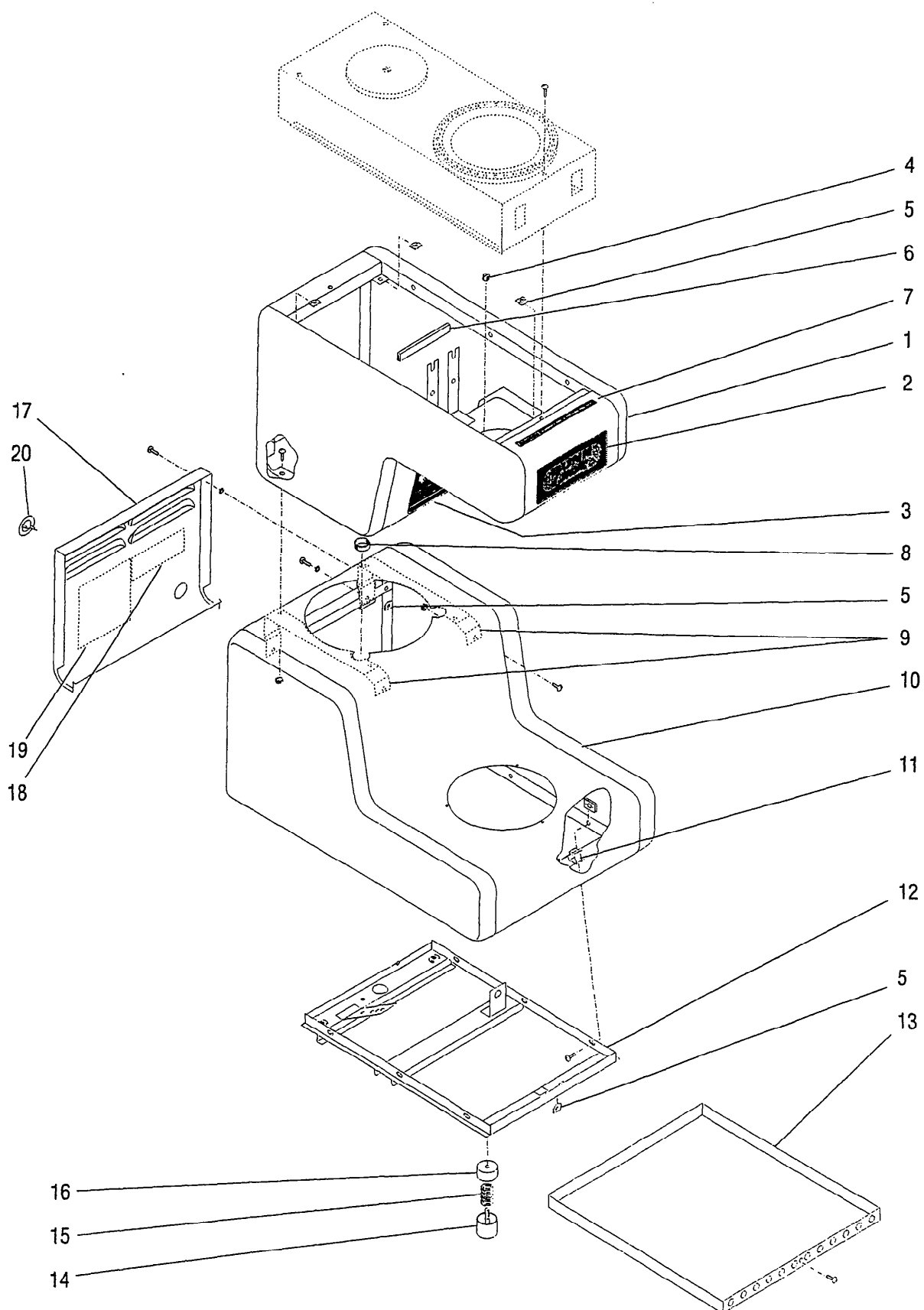
THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of Bunn are not authorized to make modifications to this warranty or to make additional warranties that are binding on Bunn. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

The Buyer shall give Bunn prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois, 62708-3227. If requested by Bunn, the Buyer shall ship the defective equipment prepaid to an authorized Bunn service location. If Bunn determines, in its sole discretion, that the equipment does not conform to the warranty, Bunn shall repair the equipment with no charge for parts during the warranty period and no charge for labor by a Bunn Authorized Service Representative during the warranty period. If Bunn determines that repair is not feasible, Bunn shall, at its sole option, replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AS SPECIFIED HEREIN, TO REPAIR OR, AT BUNN'S SOLE OPTION, REPLACEMENT OR REFUND.

In no event shall Bunn be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

ELECTRICAL & OPERATING CONTROLS (Model OL)	28
ELECTRICAL & OPERATING CONTROLS (Model RL)	32
ELECTRICAL & OPERATING CONTROLS (Model OT)	36
ELECTRICAL & OPERATING CONTROLS (Model RT)	40
FAUCET & TUBING (Model RTF & Models RT & OT with Faucet Conversion)	22
FUNNELS & BASKETS	42
HOUSINGS & PANELS (Model OL)	4
HOUSINGS & PANELS (Model RL)	6
HOUSINGS & PANELS (Model OT)	8
HOUSINGS & PANELS (Model RT)	10
NUMERICAL INDEX	44
STRAINER (Models OL & RL)	18
STRAINER/FLOW CONTROL (Models OT & RT)	20
TANK & COMPONENTS (Models OL & RL)	12
TANK & COMPONENTS (Models OT & RT)	16
WARMER ASSEMBLIES (Models OL & OT)	24
WARMER ASSEMBLIES (Models RL & RT)	26

BUNN®**HOUSINGS & PANELS (Model OL)****OL,RL
OT,RT**

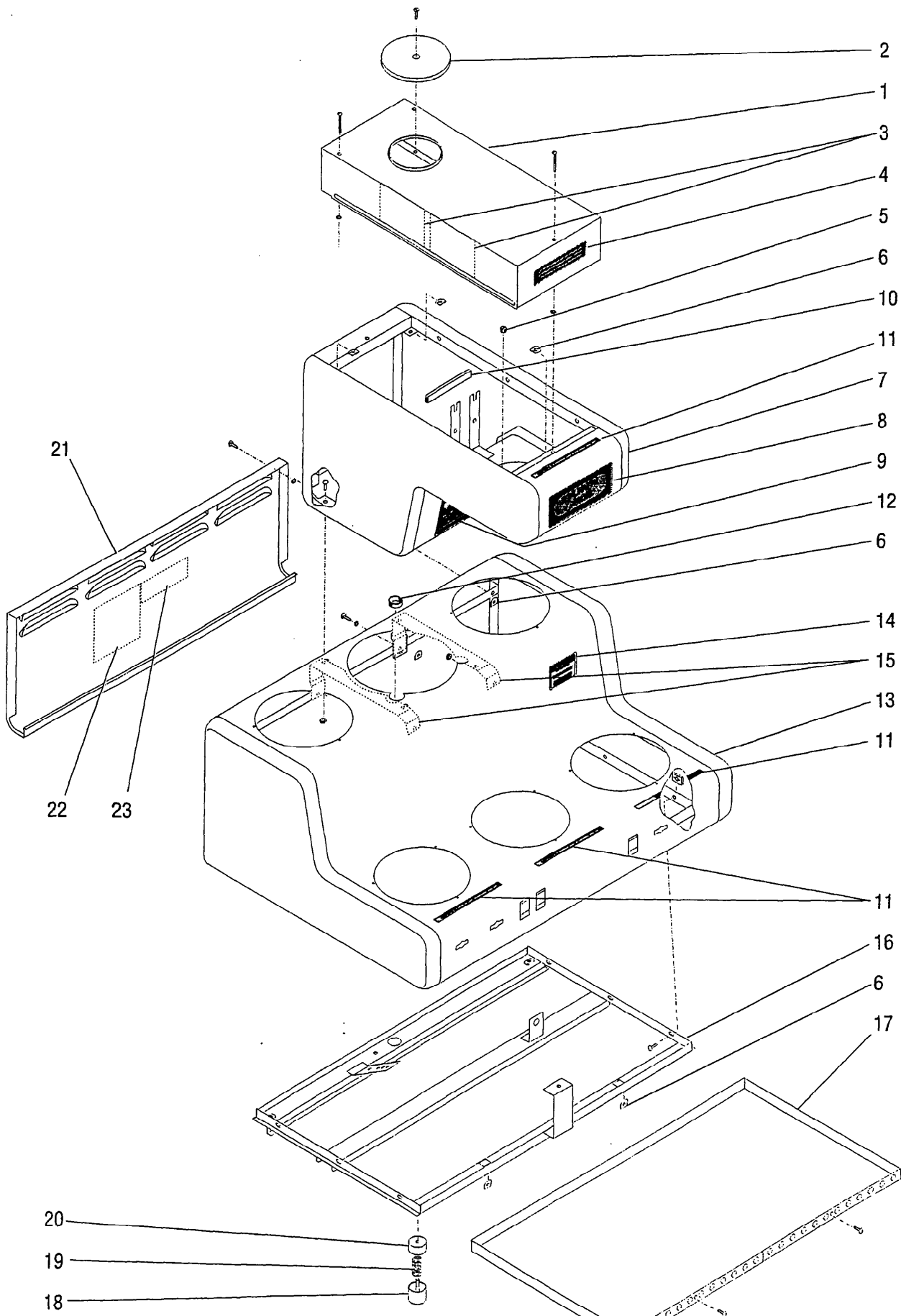
P1648

HOUSINGS & PANELS (Model OL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	05103.1000	1	Hood w/Decals (Includes items 2 thru 7)
	05103.1001	1	Hood w/Decals (Includes items 2 thru 7) (Model OL25B only)
	05103.1002	1	Hood w/Decals (Includes items 2 thru 7) (Model OL35B only)
	01331.0000	4	Screw, RND SLTD #10-32 x .50"
	00971.0000	4	Nut, KEPS #10-32
2	00823.0000	1	Decal, BUNN-O-MATIC
3	00658.0000	1	Decal, WARNING DECANter/FUNNEL
4	00462.0001	1	Plug
5	00917.0000	6	Fastener, "J" Type #8-32
6	-----	1	Gasket, U-Channel 3.50" (Order item 21)
7	12364.0000	2	Decal, Caution - Warmers are Hot
8	00606.0000	1	Bushing
9	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
10	05105.0000	1	Housing
11	00927.0000	1	Clip, Cable
12	05102.0000	1	Chassis
	05102.0001	1	Chassis (Model OL25B only)
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
13	05014.0000	1	Drip Tray
	01315.0000	1	Screw, Truss Head #8-32 x .375"
14	00754.0001	4	Foot/Locator
15	00751.0000	4	Spring
16	00752.0000	4	Cover
17	22358.1001	1	Panel w/Decals (Model OL-15)(Includes items 18 thru 20)
	22358.1000	1	Panel w/Decals (Models OL-20 & 35)(Includes items 18 & 19)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
18	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
19	00831.0000	1	Decal, WARNING ELECTRICAL
20	00715.0000	1	Adapter, Strain Relief (Model OL-15 only)
21	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

BUNN®

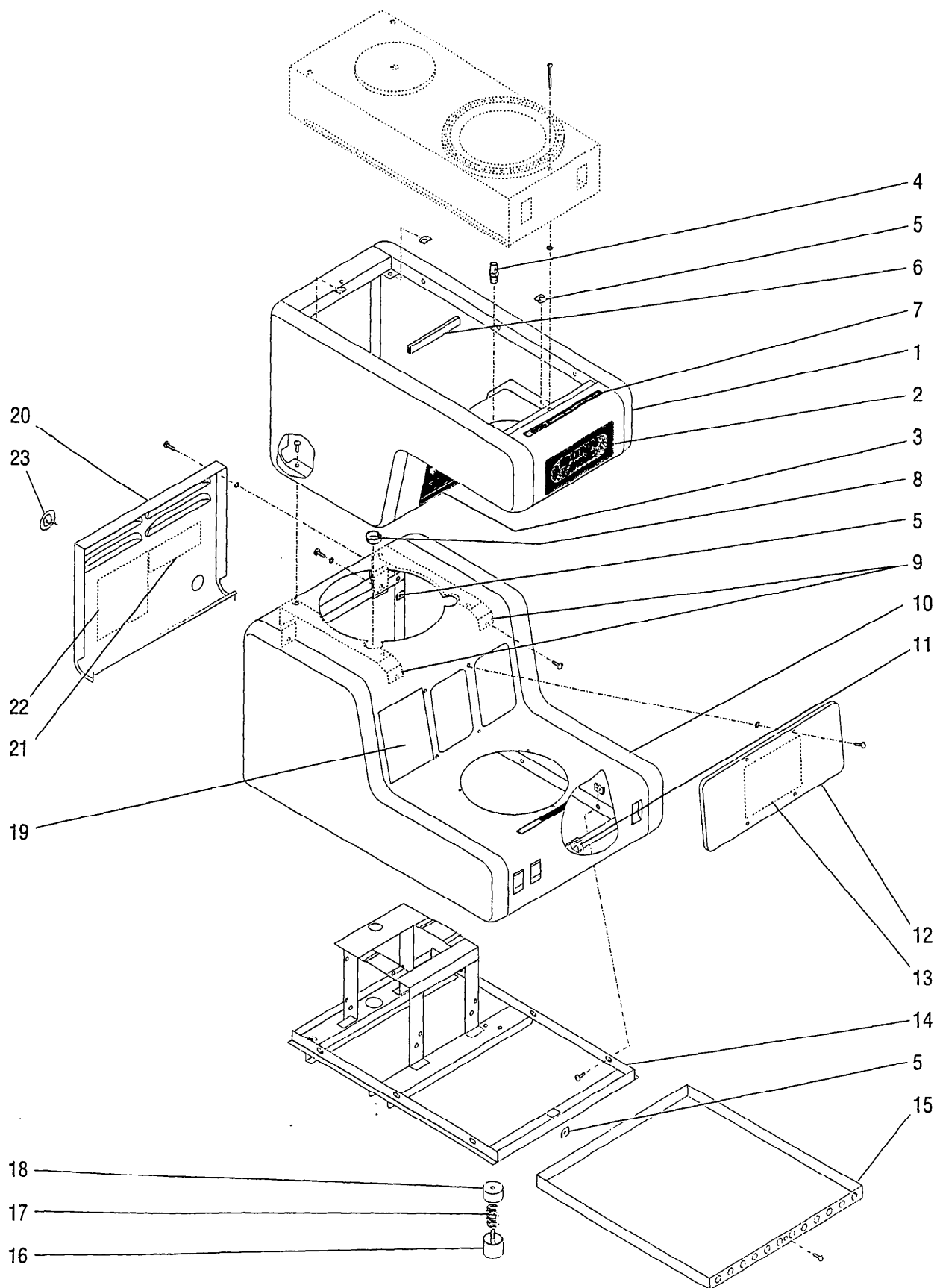
HOUSINGS & PANELS (Model RL)

**OL,RL
OT,RT**

P1649

HOUSINGS & PANELS (Model RL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	03811.1000	1	Cover w/Decals (Includes items 2 thru 4)
	01371.0000	3	Screw, RND SLTD #8-32 x 4.0"
	01516.0000	3	Washer, Nylon Retaining
2	01189.0000	1	Lid
	01377.0000	1	Screw, FLH SLTD #8-32 x .75"
	00912.0000	1	Fastener, "J" Type #8-32
3	10006.0000	1	Schematic, Electrical (Models without High Heat Warmer)
	32424.0000	1	Schematic, Electrical (Models with High Heat Warmer)
4	00803.0000	1	Decal, Decorative Stripe
5	00462.0001	1	Plug
6	00917.0000	7	Fastener, "J" Type #8-32
7	05103.1000	1	Hood w/Decals (Includes items 5 thru 11)
	05103.1002	1	Hood w/Decals (Includes items 5 thru 11)(Model RL35B w/Ready Light only)
	01331.0000	4	Screw, RND SLTD #10-32 x .50"
	00971.0000	4	Nut, KEPS #10-32
8	00823.0000	1	Decal, BUNN-O-MATIC
9	00658.0000	1	Decal, WARNING DECANter/FUNNEL
10	-----	1	Gasket, U-Channel 3.50" (Order item 24)
11	12364.0000	4	Decal, Caution - Warmers are Hot
12	00606.0000	1	Bushing
13	05092.1000	1	Housing w/Decal (Includes items 6,11,12 and 14)
14	00688.0000	1	Decal, HIGH HEAT (Models with High Heat Warmer)
15	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
16	05101.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
17	05005.0000	1	Drip Tray
	01315.0000	2	Screw, Truss Head #8-32 x .375"
18	00754.0001	4	Foot/Locator
19	00751.0000	4	Spring
20	00752.0000	4	Cover
21	22351.1000	1	Panel w/Decals (Includes item 22 and 23)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
22	00831.0000	1	Decal, WARNING ELECTRICAL
23	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
24	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

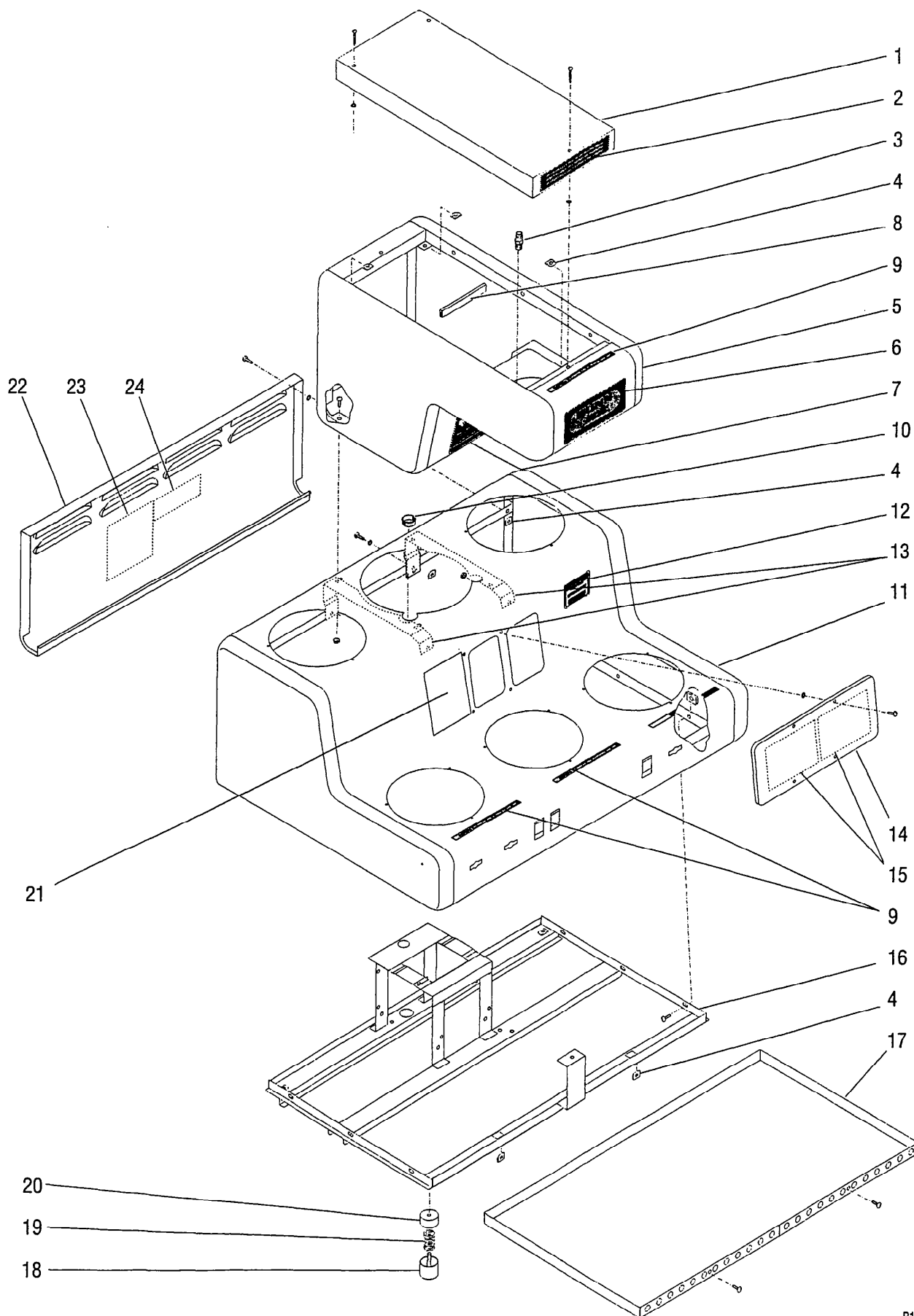


P1650

HOUSINGS & PANELS (Model OT)

Part I

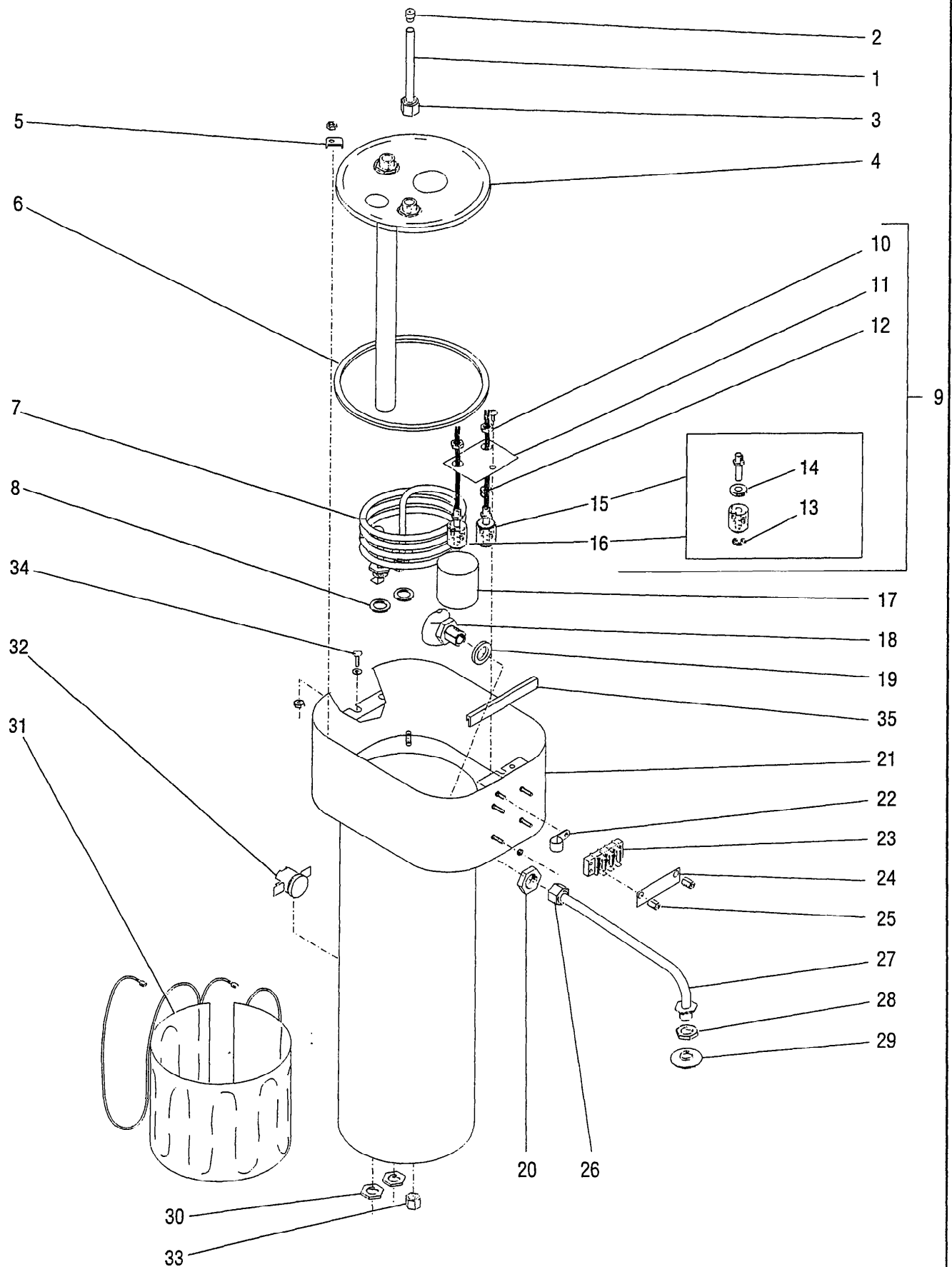
ITEM	PART NO.	QTY.	DESCRIPTION
1	05025.1000	1	Hood w/Decals (Includes items 2 thru 7)
	05194.0000	1	Hood (Model OT35 w/Interface only)
	01331.0000	4	Screw, RND SLTD #10-32 x .50"
	00971.0000	4	Nut, KEPS #10-32
2	00823.0000	1	Decal, BUNN-O-MATIC
	00875.0000	1	Decal, BUNN-O-MATIC (Model OT35 w/Interface only)
3	00658.0000	1	Decal, WARNING DECANter/FUNNEL
4	00406.0001	1	Connector
5	00917.0000	6	Fastener, "J" Type #8-32
6	-----	1	Gasket, U-Channel 3.50" (Order item 23)
7	12364.0000	2	Decal, Caution - Warmers are Hot
8	00606.0000	1	Bushing
9	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
10	05023.1000	1	Housing w/Decal (Includes items 5,7,8 & 10)
11	00927.0000	1	Clip, Cable
12	22357.0003	1	Cover w/Decal (Includes item 13)
	01318.0000	4	Screw, RND SLTD #8-32 x .50"
	01516.0000	4	Washer, Nylon Retaining
13	10278.0000	1	Schematic, Electrical
14	04974.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
15	05014.0000	1	Drip Tray
	01315.0000	1	Screw, Truss Head #8-32 x .375"
16	00754.0001	4	Foot/Locator
17	00751.0000	4	Spring
18	00752.0000	4	Cover
19	00774.0000	1	Decal, CAUTION-THERMOSTAT
20	22358.1001	1	Panel w/Decals (Model OT-15)(Includes items 21 thru 23)
	22358.1000	1	Panel w/Decals (Models OT-20 & 35)(Includes items 21 & 22)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
21	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
22	00831.0000	1	Decal, WARNING ELECTRICAL
23	00715.0000	1	Adapter, Strain Relief (Model OT-15 only)
24	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

BUNN®**HOUSINGS & PANELS (Model RT)****OL,RL
OT,RT**

P1651

HOUSINGS & PANELS (Model RT)

ITEM	PART NO.	QTY.	DESCRIPTION
1	22428.0000	1	Cover w/Decals (Includes item 2)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01322.0000	1	Screw, RND SLTD #8-32 x 1.5"
	01516.0000	3	Washer, Nylon Retaining
2	00822.0000	1	Decal, Decorative Stripe
3	00406.0001	1	Connector
4	00917.0000	7	Fastener, "J" Type #8-32
5	05025.1000	1	Hood w/Decals (Includes items 3 thru 9)
	05025.0002	1	Hood (Model RTF or Models RT & OT with Faucet Conversion)
	01331.0000	4	Screw, RND SLTD #10-32 x .50"
	00971.0000	4	Nut, KEPS #10-32
6	00823.0000	1	Decal, BUNN-O-MATIC
	00875.0000	1	Decal, BUNN-O-MATIC (Model RTF or Models RT & OT with Faucet Conversion)
7	00658.0000	1	Decal, WARNING DECANter/FUNNEL
8	-----	1	Gasket, U-Channel 3.50" (Order item 25)
9	12364.0000	4	Decal, Caution - Warmers are Hot
10	00606.0000	1	Bushing
11	05027.1000	1	Housing w/Decal (Includes items 4,10 and 12)
12	00688.0000	1	Decal, HIGH HEAT (Models with High Heat Warmer)
13	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
14	22357.0002	1	Cover w/Decal (Includes item 15)
	01318.0000	4	Screw, RND SLTD #8-32 x .50"
	01516.0000	4	Washer, Nylon Retaining
15	10277.0000	1	Schematic, Electrical (Models without High Heat Warmer)
	32423.0000	1	Schematic, Electrical (Models with High Heat Warmer)
16	04970.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
17	05005.0000	1	Drip Tray
	01315.0000	2	Screw, Truss Head #8-32 x .375"
18	00754.0001	4	Foot/Locator
19	00751.0000	4	Spring
20	00752.0000	4	Cover
21	00774.0000	1	Decal, CAUTION-THERMOSTAT
22	22351.1000	1	Panel w/Decals (Includes item 23 and 24)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
23	00831.0000	1	Decal, WARNING ELECTRICAL
24	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
25	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

BUNN®**TANK & COMPONENTS (Models OL & RL)****OL,RL
OT,RT**

P1652

TANK & COMPONENTS (Models OL & RL)

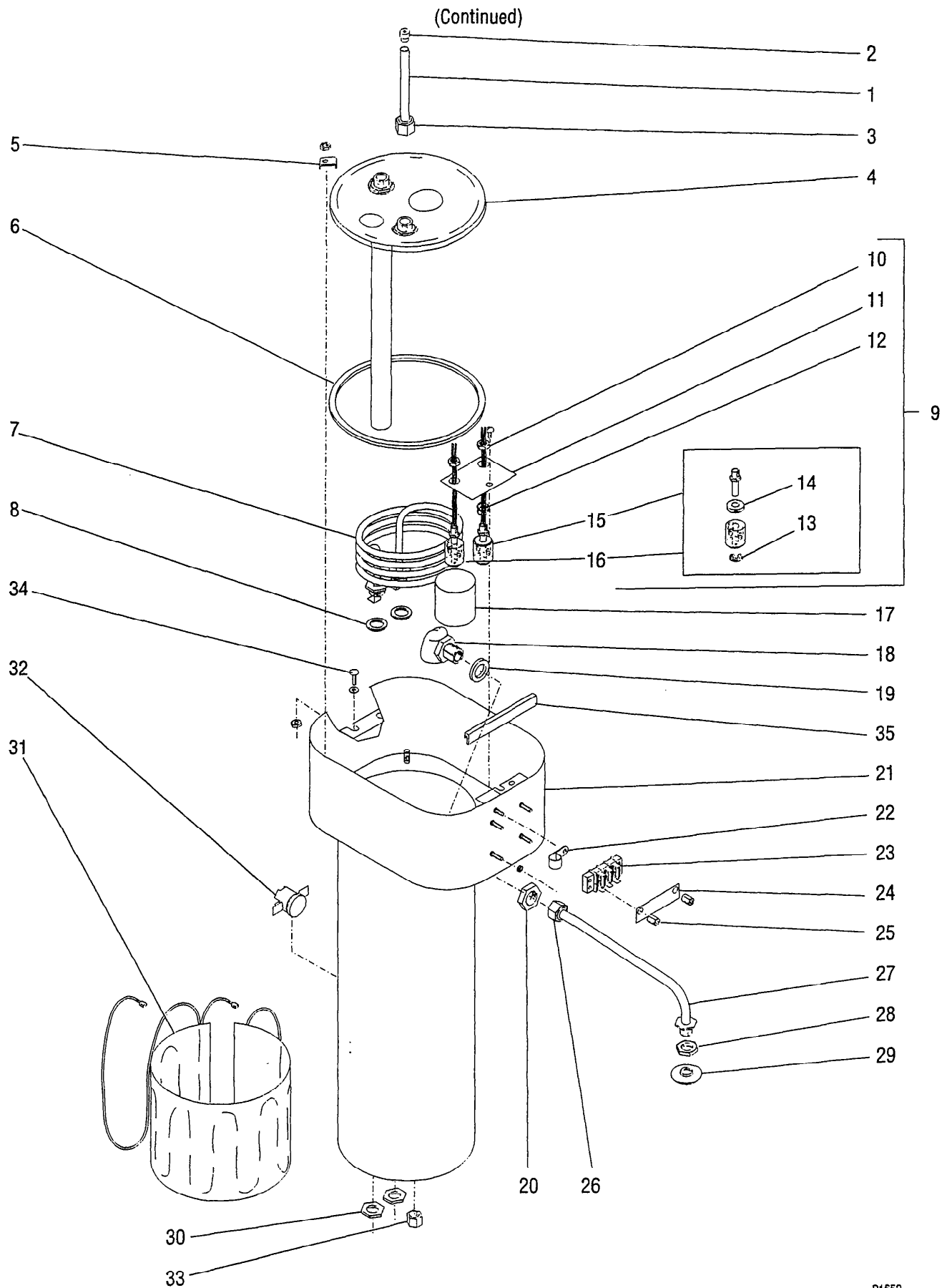
Part I

ITEM	PART NO.	QTY.	DESCRIPTION
-	05033.1000	1	Tank Assy (1425W, 120V)(Includes items 1 thru 33)
	05032.1000	1	Tank Assy (1800W, 120V)(Includes items 1 thru 33)
	05038.1000	1	Tank Assy (3500W, 120/240V)(Includes items 1 thru 33)
	-----	1	Tank Assy (3500W, 230V)(Includes items 1 thru 33)
	-----	1	Tank Assy (2500W, 100V)(Includes items 1 thru 33)
	-----	1	Tank Assy (3500W, 200V)(Includes items 1 thru 33)
1	20768.0000	1	Tube Assy (Includes item 2)
2	03989.0000	1	Grommet
3	00929.0001	1	Fitting, Compression
4	05078.0000	1	Lid, Tank
5	02775.0000	4	Bracket, Hold Down
	00908.0000	4	Nut, Hex #8-32
6	02747.0000	1	Gasket, Tank Lid
7	02755.1000	1	Element, Tank Heater (1425W, 120V)(Includes item 8)
	02756.1000	1	Element, Tank Heater (1800W, 120V)(Includes item 8)
	05037.1000	1	Element, Tank Heater (3500W, 240V)(Includes item 8)
	05036.1000	1	Element, Tank Heater (2500W, 100V)(Includes item 8)
	20942.1000	1	Element, Tank Heater (3500W, 200V)(Includes item 8)
8	00943.0000	2	Gasket
9	05110.1000	1	Float Switch Assy (Includes items 10 thru 14)
	02308.0000	1	Screw, PNH SLTD #8-32 x .375"
10	00946.0000	2	Nut, Hex Brass .125-27
11	05084.0000	1	Bracket
12	05108.0000	1	Spring
13	03807.0000	1	Ring, Retaining
14	01527.0000	3	Washer, Adjusting
15	05106.0000	1	Float Switch (Includes items 13 & 14)
16	05106.0001	1	Float Switch (Includes item 13)
17	05082.0000	1	Overflow Cup
18	02713.0000	1	Syphon
19	02746.0000	1	Gasket
20	02745.0000	1	Nut
21	05039.0000	1	Tank
22	04831.0000	1	Clip
	00970.0000	2	Nut, KEPS #8-32

(Continued)

BUNN®**TANK & COMPONENTS (Models OL & RL)****OL,RL
OT,RT**

(Continued)

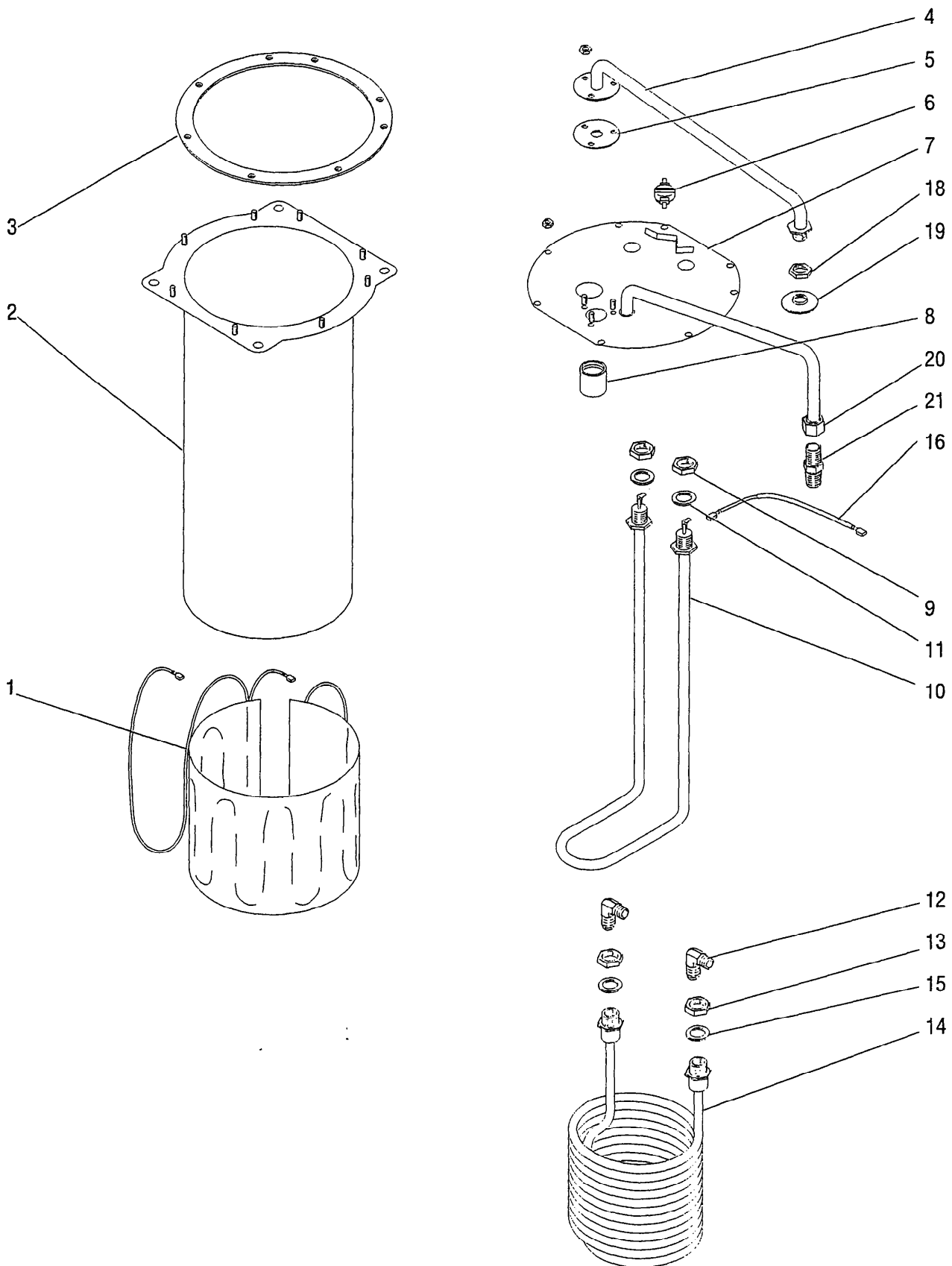


P1652

TANK & COMPONENTS (Models OL & RL)

Part I

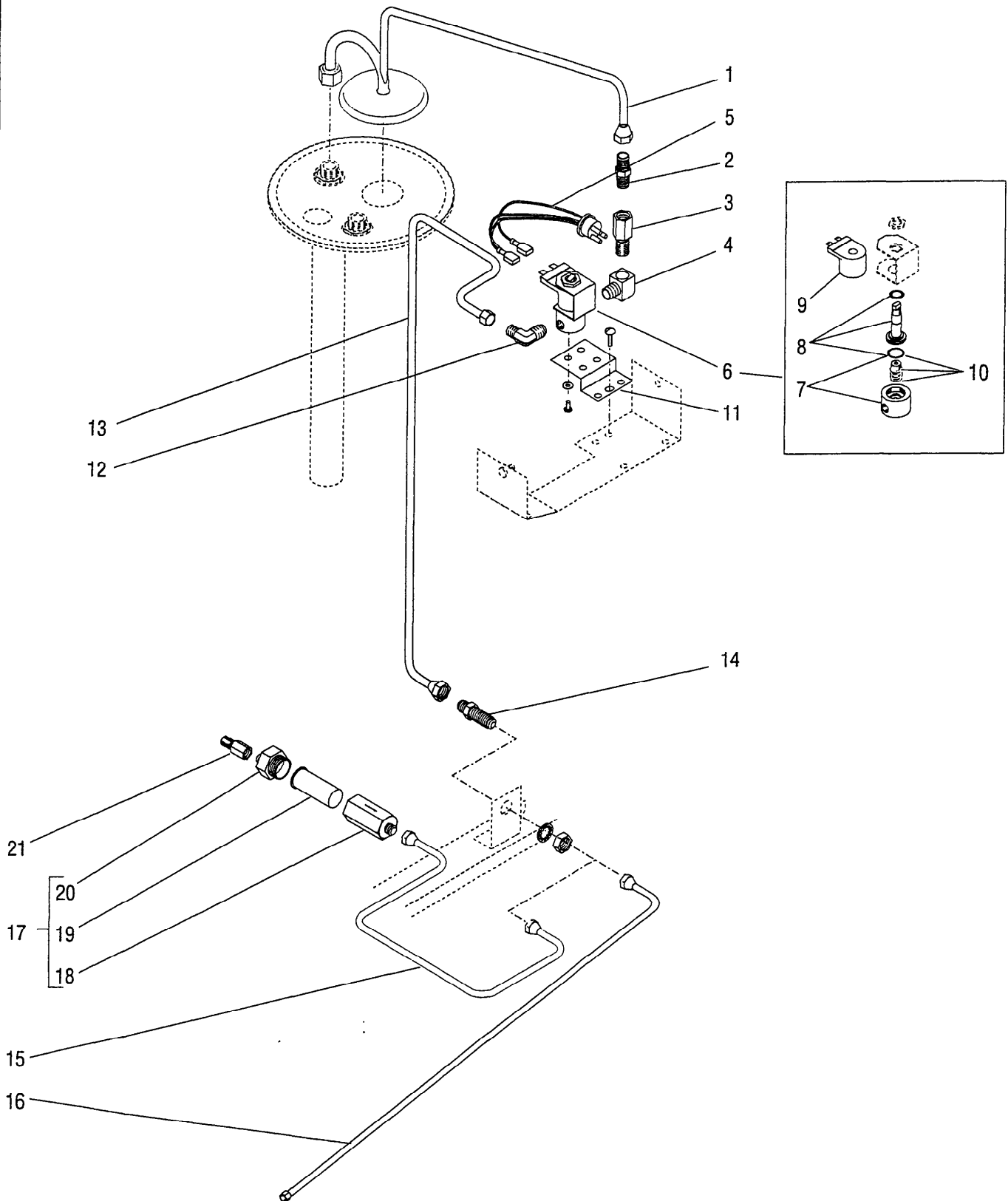
ITEM	PART NO.	QTY.	DESCRIPTION
23	05067.0000	1	Terminal Block
24	05070.0000	1	Plate
	00970.0000	2	Nut, KEPS #8-32
25	00932.0000	2	Spacer
26	00929.0001	1	Fitting, Compression
27	12747.0000	1	Tube, Sprayhead
28	01075.0000	1	Nut, Sprayhead
29	01082.0000	1	Sprayhead
30	00942.0000	2	Nut
31	04626.0000	1	Blanket Heater (120V)
	01928.0000	1	Blanket Heater (240V)
32	29329.1000	1	Limit Thermostat
33	00935.0001	1	Cap
34	01370.0000	1	Screw, PNH SLTD #8-32 x .75"
	01522.0000	1	Washer
	00908.0000	1	Nut, Hex #8-32
35	-----	1	Gasket, U-Channel 3.50" (Order item 36)
36	02434.1000	-	Gasket, U-Channel 18.0" (Use As Required)

BUNN®**TANK & COMPONENTS (Models OT & RT)****OL,RL
OT,RT**

P1653

TANK & COMPONENTS (Models OT & RT)

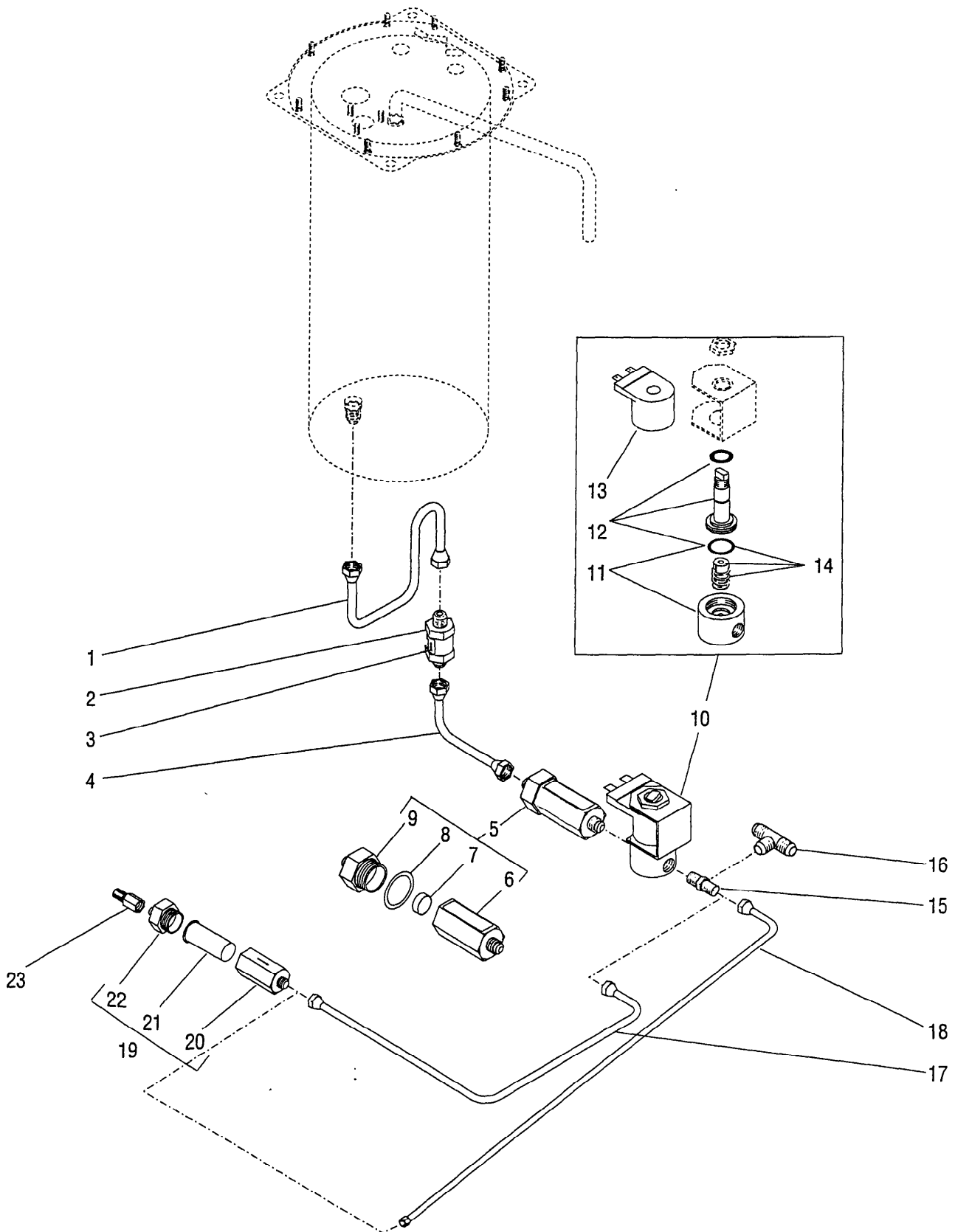
ITEM	PART NO.	QTY.	DESCRIPTION
-	05682.1000	1	Tank Assy (1320W, 120V)(Includes items 1 thru 11)
	05683.1000	1	Tank Assy (1800W, 120V)(Includes items 1 thru 11)
	05684.0000	1	Tank Assy (3500W, 120/240V)(Includes items 1 thru 11)
	-----	1	Tank Assy (3500W, 240V)(Includes items 1 thru 11)
	-----	1	Tank Assy (Model RTF only)(3500W, 120/240V)(Includes items 1 thru 17)
1	04626.0000	1	Blanket Warmer (120V)
	01928.0000	1	Blanket Warmer (240V)
2	04129.0000	1	Tank
3	04221.0000	1	Gasket, Tank Lid
4	05553.0000	1	Tube Kit, Sprayhead (Includes items 5 and 8)
	00908.0000	3	Nut
5	05515.0000	1	Gasket
6	29329.1000	1	Limit Thermostat
7	05533.0000	1	Tank Lid
	05533.0002	1	Tank Lid (Model RTF or Models RT & OT with Faucet Conversion)
	00908.0000	8	Nut
8	05518.0000	1	Hub, Syphon
9	00942.0000	2	Nut
10	04236.1000	1	Element, Tank Heater (1320W, 120V)(Includes item 11)
	04636.1000	1	Element, Tank Heater (1800W, 120V)(Includes item 11)
	04637.1000	1	Element, Tank Heater (3500W, 120/240V)(Includes item 11)
11	00943.0000	2	Gasket
12	00400.0001	2	Fitting, Elbow (Model RTF or Models RT & OT with Faucet Conversion)
13	12687.0000	2	Nut (Model RTF or Models RT & OT with Faucet Conversion)
14	12689.1000	1	Coil Assy (Includes item 15) (Model RTF or Models RT & OT with Faucet Conversion)
15	12688.0000	2	Gasket (Model RTF or Models RT & OT with Faucet Conversion)
16	20211.0100	1	Thermal Fuse (Model RTF or Models RT & OT with Faucet Conversion)
17	21016.0122	1	Lead, Black 4.0" (Not Illustrated)(Model RTF or Models RT & OT with Faucet Conversion)
18	01075.0000	1	Nut, Sprayhead
19	01082.0000	1	Sprayhead
20	00929.0001	1	Fitting, Compression
21	00406.0001	1	Connector

BUNN®**STRAINER (Models OL & RL)****OL,RL
OT,RT**

P1654

STRAINER (Models OL & RL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	05096.0000	1	Tube, Fill Basin
2	00402.0001	1	Connector
3	00458.0001	1	Adapter
4	00432.0001	1	Elbow
5	03820.0000	1	Lead, Solenoid Jumper
6	-----	1	Solenoid, 120V, 1.48" Dia Coil (Not available, order 01085.0002)
	01085.0002	1	Solenoid, 120V, 1.00" Dia Coil (Includes items 7 thru 10)
	01975.0000	1	Solenoid, 240V (Includes items 7 thru 10)
	01138.0000	1	Solenoid, 100V (Includes items 7 thru 10)
	21180.0000	1	Solenoid, 200V (Includes items 7 thru 10)
	01327.0000	2	Screw, PNH PHH #10-32 x .375"
	01502.0000	2	Lockwasher, #10
7	-----	1	Solenoid Valve Base, 1.48" Dia Coil (Not available, order 01085.0002)
	28479.0000	1	Solenoid Valve Base Kit, 1.00" Dia Coil (Includes O-ring)
8	01116.0000	1	Guide, 1.48" Dia Coil
	28481.0000	1	Guide Kit, 1.0" Dia Coil (Includes Washer and O-ring)
9	01101.0000	1	Solenoid Valve Coil, 120V, 1.48" Dia Coil
	28480.0000	1	Solenoid Valve Coil, 120V, 1.00" Dia Coil
	21181.0000	1	Solenoid Valve Coil, 200V
	01100.0000	1	Solenoid Valve Coil, 240V
	01139.0000	1	Solenoid Valve Coil, 100V
10	01111.0000	1	Solenoid Valve Repair Kit, 1.48" Dia Coil (Includes Plunger, Seal and Spring)
	01111.0002	1	Solenoid Valve Repair Kit, 1.00" Dia Coil (Includes Plunger, Spring and O-ring)
11	20201.4300	1	Bracket
	02308.0000	1	Screw, PNH SLTD #8-32 x .375"
12	20581.0001	1	Elbow
13	05119.0000	1	Tube
14	00459.0001	1	Fitting, Bulkhead
	01532.0000	1	Lockwasher, Internal-tooth .438"
	00463.0000	1	Nut, Hex .438-20"
15	01119.0000	1	Tube (Model OL-15 only)
16	01104.0000	1	Tube
17	23820.0000	1	Strainer (Includes items 18 thru 20)
18	-----	1	Body (Order item 17)
19	23721.0000	1	Screen
20	22249.0000	1	Cap, End
21	22293.0000	1	Adapter (Model OL-15 only)

BUNN®**STRAINER/FLOW CONTROL (Models OT & RT)****OL,RL
OT,RT**

P1655

STRAINER/FLOW CONTROL (Models OT & RT)

Part I

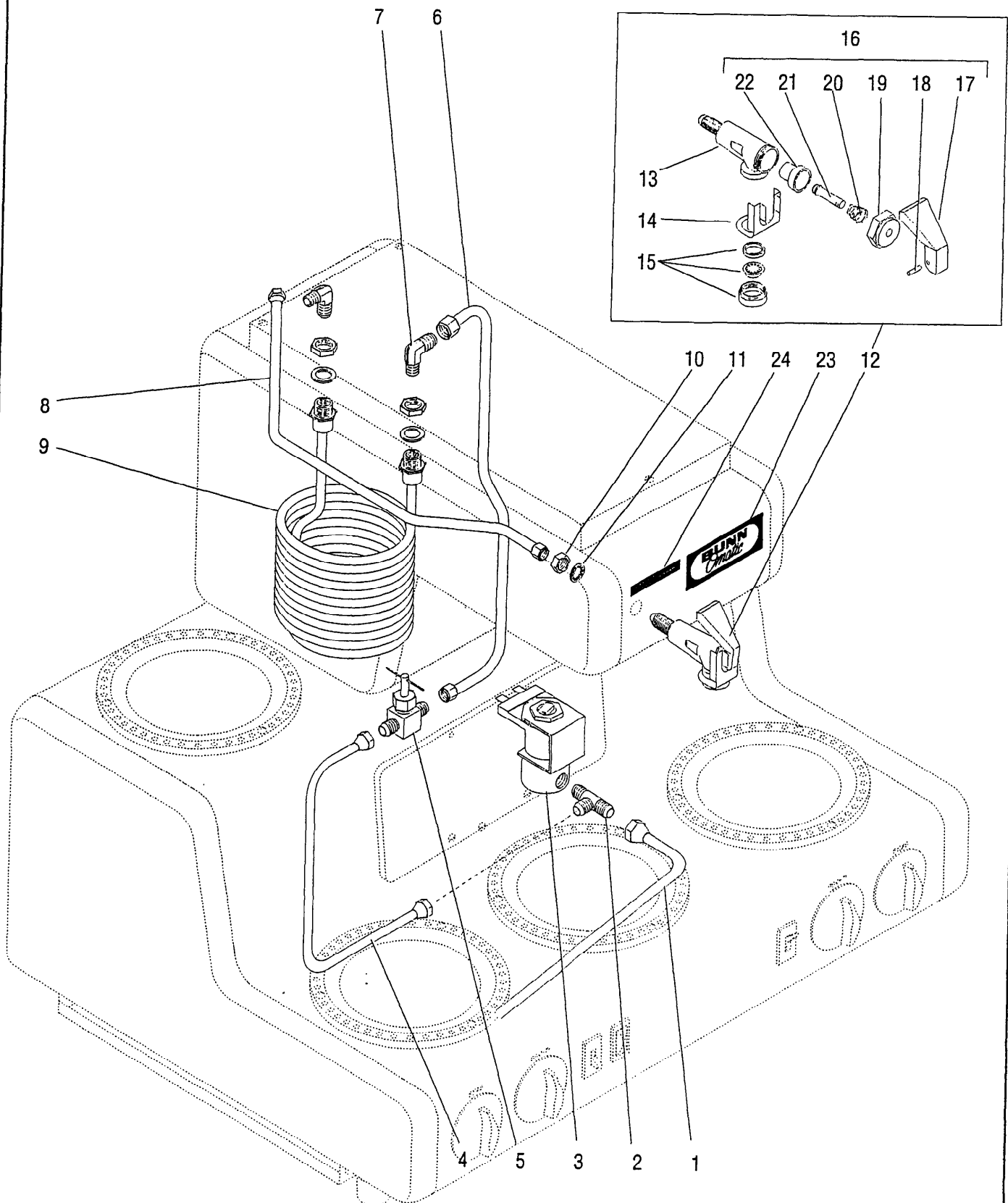
ITEM	PART NO.	QTY.	DESCRIPTION
1	00305.0000	1	Tube
2	01171.0001	1	Check Valve (Includes item 3)
3	20554.0001	1	Decal, Check Valve
4	00310.0002	1	Tube
	00310.0000	1	Tube (For use with 240V solenoid)
5	20528.1195	1	Flow Control, .195 GPM (Includes items 6 thru 9)
6	-----	1	Body (Order item 5)
7	20526.1195	1	Valve, Flow Control
8	01155.0000	1	Gasket, Flow Control
9	01154.0001	1	Outlet, Flow Control
10	-----	1	Solenoid, 120V, 1.48" Dia Coil (Not available, order 01085.0002)
	01085.0002	1	Solenoid, 120V, 1.00" Dia Coil (Includes items 11 thru 14)
	01975.0000	1	Solenoid, 240V (Includes items 11 thru 14)
	21180.0000	1	Solenoid, 200V (Includes items 11 thru 14)
	01326.0000	2	Screw, PNH PHH #10-32 x .25"
	01512.0000	2	Lockwasher, External-tooth #10
11	-----	1	Solenoid Valve Base, 1.48" Dia Coil (Not available, order 01085.0002)
	28479.0000	1	Solenoid Valve Base Kit, 1.00" Dia Coil (Includes O-ring)
12	01116.0000	1	Guide, 1.48" Dia Coil
	28481.0000	1	Guide Kit, 1.0" Dia Coil (Includes Washer and O-ring)
13	01101.0000	1	Solenoid Valve Coil, 120V, 1.48" Dia Coil
	28480.0000	1	Solenoid Valve Coil, 120V, 1.00" Dia Coil
	21181.0000	1	Solenoid Valve Coil, 200V
	01100.0000	1	Solenoid Valve Coil, 240V
14	01111.0000	1	Solenoid Valve Repair Kit, 1.48" Dia Coil (Includes Plunger, Seal and Spring)
	01111.0002	1	Solenoid Valve Repair Kit, 1.00" Dia Coil (Includes Plunger, Spring and O-ring)
15	00402.0001	1	Connector
16	00398.0002	1	Tee (Model RTF only)
17	01117.0000	1	Tube (Model OT-15 only)
18	01104.0000	1	Tube
19	23820.0000	1	Strainer (Includes items 20 thru 22)
20	-----	1	Body (Order item 17)
21	23721.0000	1	Screen
22	22249.0000	1	Cap, End
23	22293.0000	1	Adapter (Model OT-15 only)

BUNN®

FAUCET & TUBING

(Models RTF & RT & OT with Faucet Conversion)

OL,RL
OT,RT

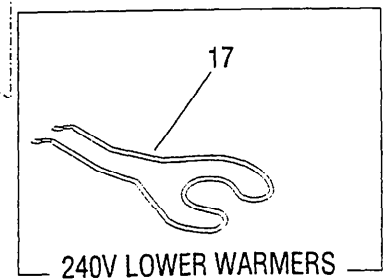
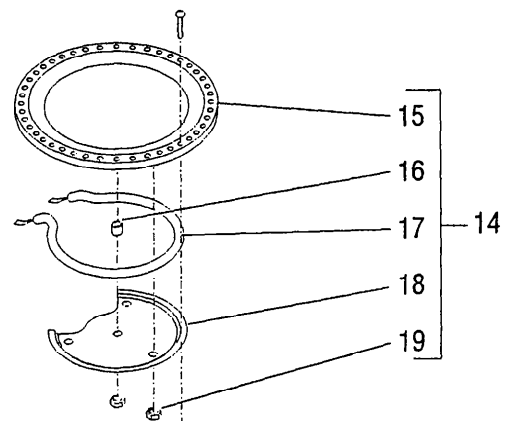
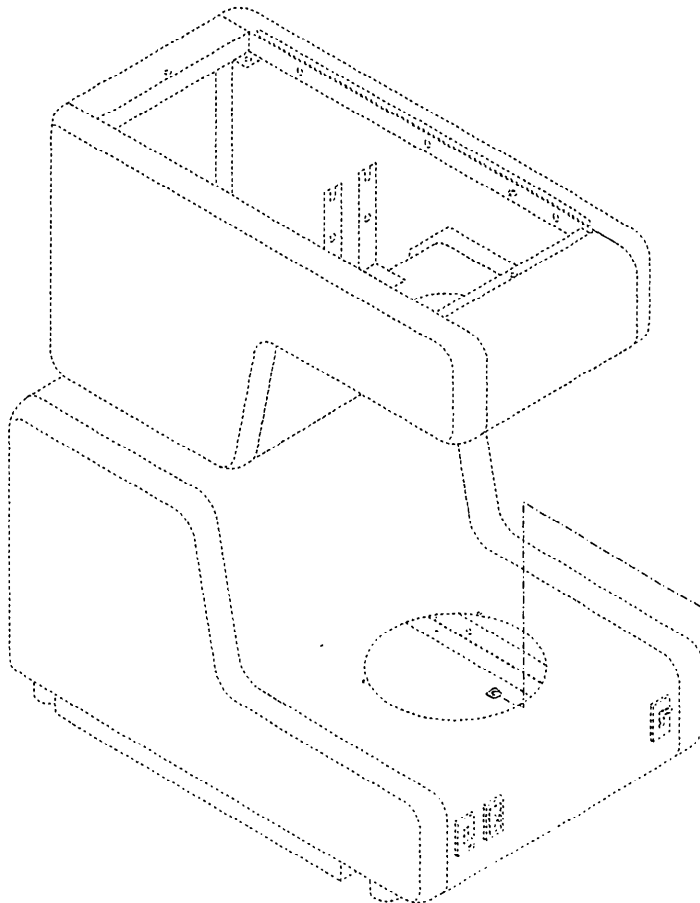
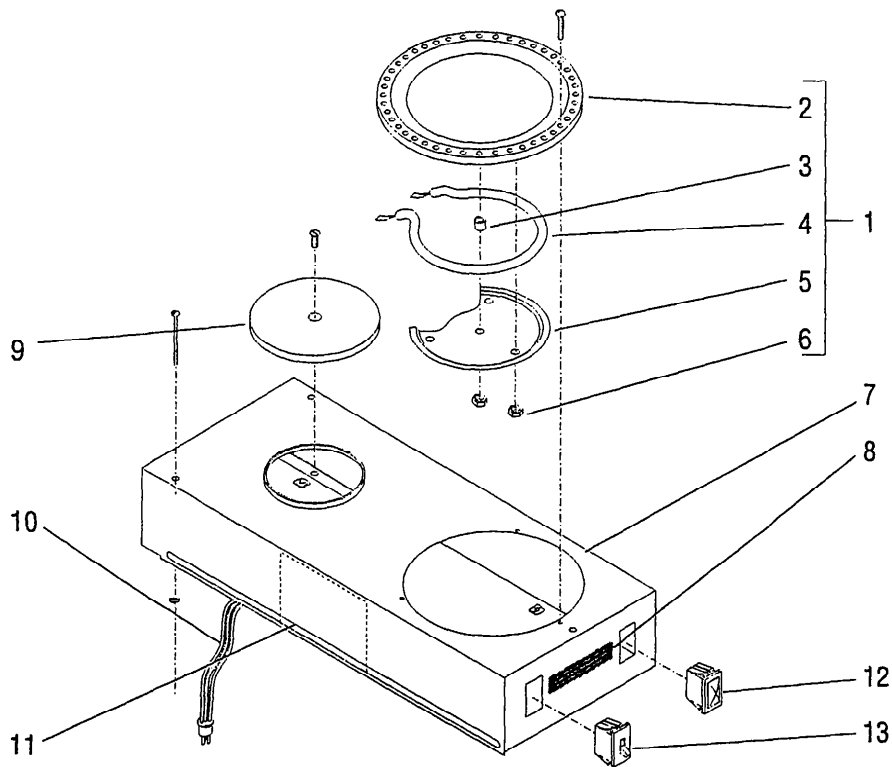


P1656

FAUCET & TUBING(Models RTF & RT & OT with Faucet Conversion)

Part I

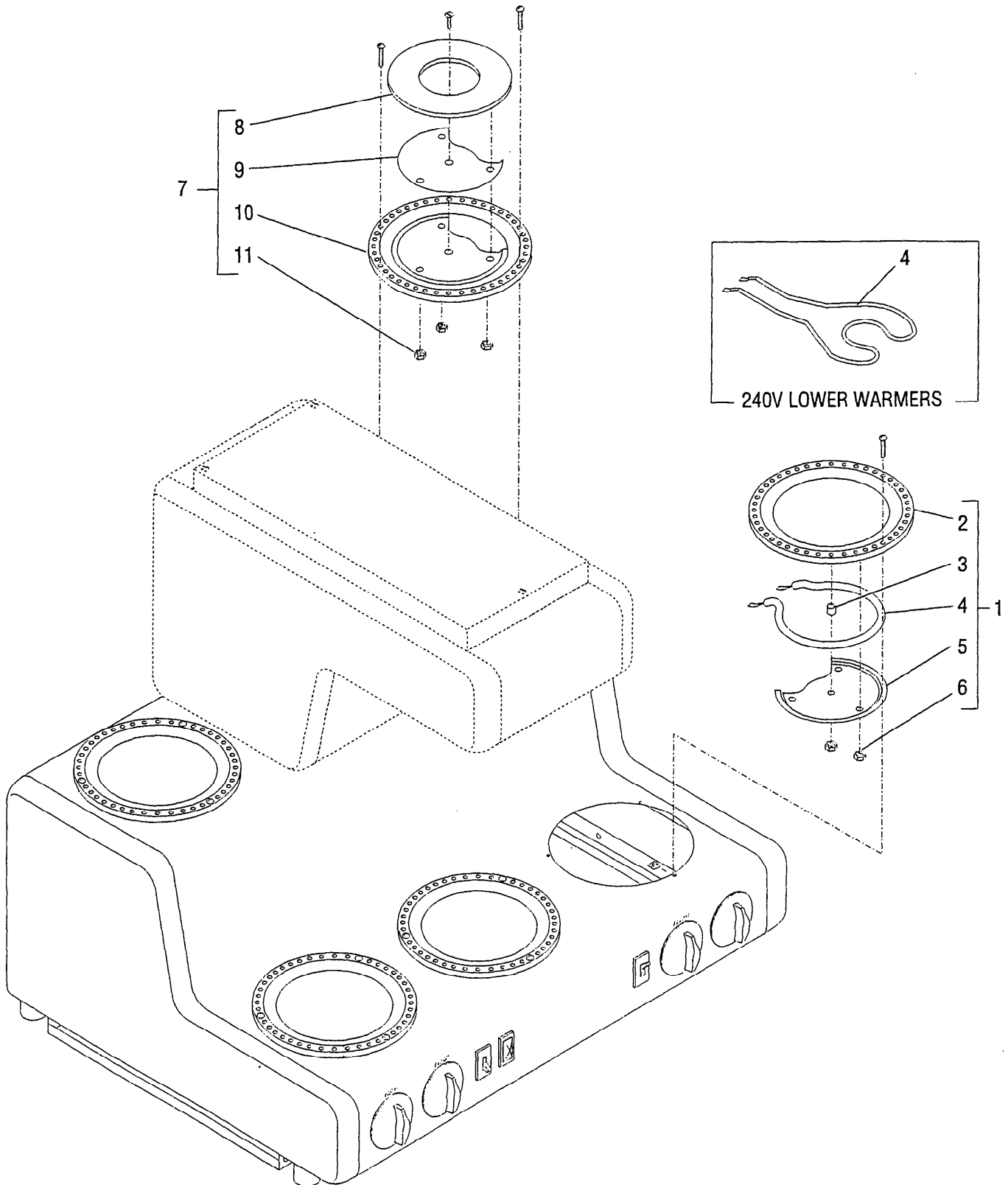
ITEM	PART NO.	QTY.	DESCRIPTION
1	-----	1	Tube (See STRAINER/FLOW CONTROL)
2	00398.0002	1	Tee
3	-----	1	Solenoid (See STRAINER/FLOW CONTROL)
4	05011.0000	1	Tube
5	00484.0001	1	Valve, Needle
6	20726.0000	1	Tube
7	00402.0001	2	Elbow
8	20747.0000	1	Tube
9	-----	1	Coil Assy (See TANK & COMPONENTS)
10	13059.0000	1	Nut
11	01532.0000	1	Lockwasher, Internal-tooth .438"
12	12915.0000	1	Faucet Assy (Includes items 13 thru 22)
13	-----	1	Body (Order item 12)
14	13057.0000	1	Clip, Safety
15	13058.0000	1	Aerator Kit
16	13061.0000	1	Handle/Stem Assy (Includes items 17 thru 22)
17	13053.0000	1	Handle Kit (Includes item 18)
18	02858.0000	1	Pin, Spring .125" Dia x .50"
19	13060.0000	1	Bonnet Nut
20	13055.0000	1	Spring
21	13054.0000	1	Stem
22	13056.0000	1	Seat Cup
23	00875.0000	1	Decal, BUNN-O-MATIC
24	20201.5600	1	Decal, WARNING HOT WATER

BUNN®**WARMER ASSEMBLIES (Models OL & OT)****OL,RL
OT,RT**

P1657

WARMER ASSEMBLIES (Models OL & OT)

ITEM	PART NO.	QTY.	DESCRIPTION
-	03810.1000	1	Warmer Housing Assy (Model OL)(Includes items 1 thru 13)
-	00225.1001	1	Warmer Housing Assy (Model OT)(Includes items 1 thru 8, 10, 12 & 13)
1	03652.0000	1	Warmer Assy, 100W/120V (Includes items 2 thru 6)
	02817.0000	1	Warmer Assy, 240V (Includes items 2 thru 6)
	11440.0011	1	Warmer Assy, 200V (Includes items 2 thru 6)
	01303.0000	3	Screw, PNH PHH #4-40 x .50"
	00916.0000	3	Fastener, "J" Type #4-40
2	03656.0000	1	Dish
3	13042.0001	1	Spacer
4	01227.0000	1	Element (100W/120V)
	01951.0000	1	Element (100W/240V)
	01951.0001	1	Element (100W/200V)
5	05212.0000	1	Plate
6	00970.0000	2	Nut
7	03813.0000	1	Housing, Top Warmer (Model OL)
	05717.0000	1	Housing, Top Warmer (Model OT)
	01323.0000	3	Screw, #8-32 x 2.5" (Model OL)
	01371.0000	3	Screw, #8-32 x 4.0" (Model OT)
	01516.0000	3	Washer, Nylon Retaining
8	00804.0000	1	Decal, Decorative Stripe
9	01189.0000	1	Lid, Pour Over (Model OL only)
	01377.0000	1	Screw, FLH SLTD #8-32 x .75"
	00912.0000	1	Fastener, "J" Type #8-32
10	01860.0000	1	Harness, Top Warmer (120V)
	01860.0001	1	Harness, Top Warmer (240V)
11	10007.0000	1	Schematic, Electrical (Model OL only)
12	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
13	01186.0000	1	Switch, ON/OFF
14	03697.0000	1	Warmer Assy, 100W/120V (Includes items 15 thru 19)
	02817.0000	1	Warmer Assy, 100W/240V (Includes items 15 thru 19)
	01303.0000	3	Screw, PNH PHH #4-40 x .50"
	00916.0000	3	Fastener, "J" Type #4-40
15	03656.0000	1	Dish
16	13042.0001	1	Spacer (120V only)
17	01143.0000	1	Element (100W/120V)
	01951.0000	1	Element (100W/240V)
18	05212.0000	1	Plate
19	00970.0000	2	Nut



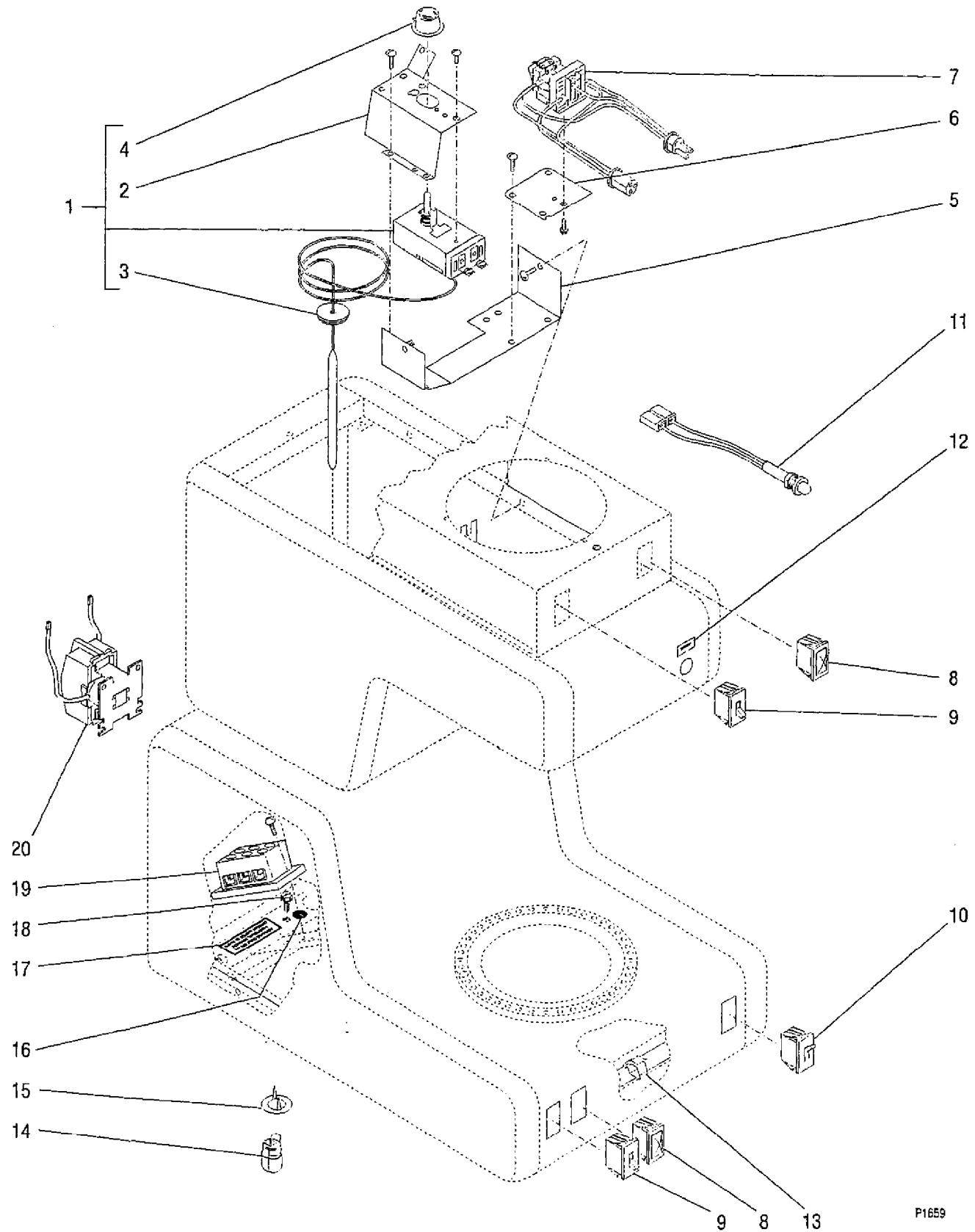
WARMER ASSEMBLIES (Models RL & RT)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION	
1	03697.0000	5	Warmer Assy, 130W/120V (Includes items 2 thru 6)	
	02817.0000	5	Warmer Assy, 240V (Includes items 2 thru 6)	
	01303.0000	16	Screw, PNH PHH #4-40 x .50"	
	01304.0000	1	Screw, PNH PHH #4-40 x .75"	
	00916.0000	17	Fastener, "J" Type #4-40	
2	03656.0000	1	Dish	
3	13042.0001	1	Spacer (120V only)	
4	01143.0000	1	Element (100W/120V)	
	01951.0000	1	Element (100W/240V)	
5	05212.0000	1	Plate	
6	00970.0000	2	Nut	
7	03311.0000	1	Warmer Assy, High Heat 120V (Includes items 8 thru 11)	Models with High Heat Warmers
	03312.0000	1	Warmer Assy, High Heat 240V (Includes items 8 thru 11)	
	01303.0000	3	Screw, PNH PHH #4-40 x .50"	
	00916.0000	3	Fastener, "J" Type #4-40	
8	01161.0000	1	Element, 120V (Includes hardware below)	
	01907.0000	1	Element, 240V (Includes hardware below)	
	01503.0000	3	Washer	
	00910.0000	3	Nut, Hex #10-32	
9	01198.0000	1	Plate, Retainer	
	01332.0000	1	Screw, PNH SLTD #10 x .50"	
10	01197.0000	1	Dish	
11	00909.0000	3	Nut, Brass #10-32	

BUNN®

ELECTRICAL & OPERATING CONTROLS (Model OL)

OL,RL
OT,RT

P1659

ELECTRICAL & OPERATING CONTROLS (Model OL)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 thru 4)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	20771.0001	1	Bracket
	01315.0000	2	Screw, TRH PHH #8-32 x .375"
3	07073.0000	1	Grommet
4	00720.0000	1	Knob
5	05089.0000	1	Bracket, Component Mounting
	01315.0000	1	Screw, TRH PHH #8-32 x .375"
6	05000.0000	1	Plate
	02308.0000	2	Screw, PNH SLTD #8-32 x .375"
7	02056.0000	1	Relay (120V)
	01977.0000	1	Relay (240V)
	02328.0000	1	Screw, PNH SLTD #6-32 x .375"
8	01088.0000	2	Lamp (120V)
	01089.0000	2	Lamp (240V)
9	01186.0000	2	Switch, ON/OFF
10	01061.0000	1	Switch, MOMENTARY START
11	12984.0004	1	Lamp Assy, Ready (Model OL35B only)
12	20749.0000	1	Decal, READY (Model OL35B only)
13	00927.0000	1	Clip, Cable
14	01666.0000	1	Bushing, Strain Relief (Model OL15 only)
15	00715.0000	1	Washer, Strain Relief (Model OL15 only)
16	00824.0000	1	Decal, Grounding (Model OL35A only)
17	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO (Not Applicable to model OL15)
18	01309.0000	1	Screw, Harness Grounding
19	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01317.0000	2	Screw, TRH PHH #8-32 x .50"
20	06335.0004	1	Contactor (Model OL25B only)
	01331.0000	2	Screw, RND SLTD #10-32 x .50"

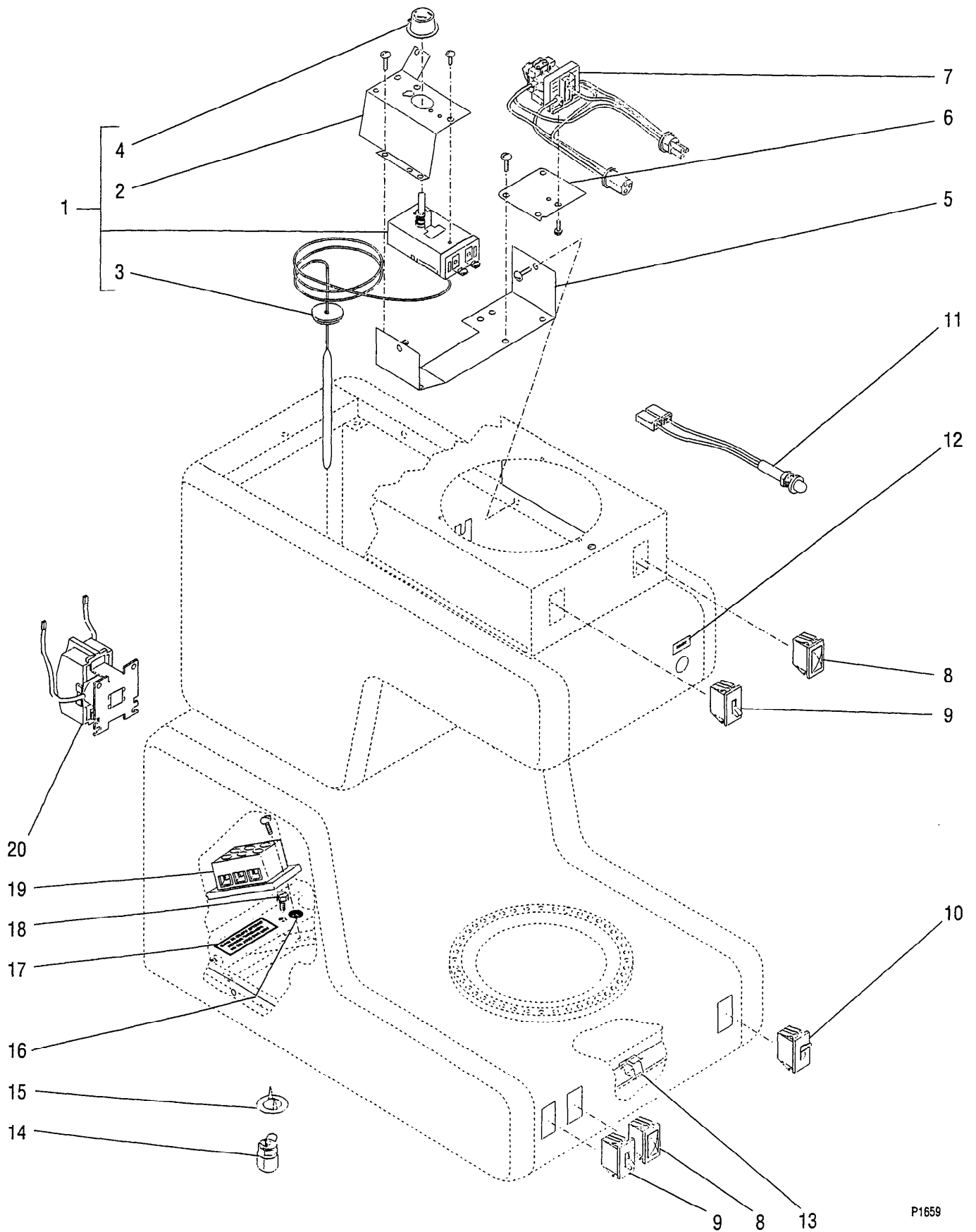
The following items are not illustrated

21	01860.0000	1	Harness, Top Warmer, 120V
	01860.0001	1	Harness, Top Warmer, 240V
22	04513.0000	1	Power Cord (OL15 only)

(Continued)

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model OL)****OL,RL
OT,RT**

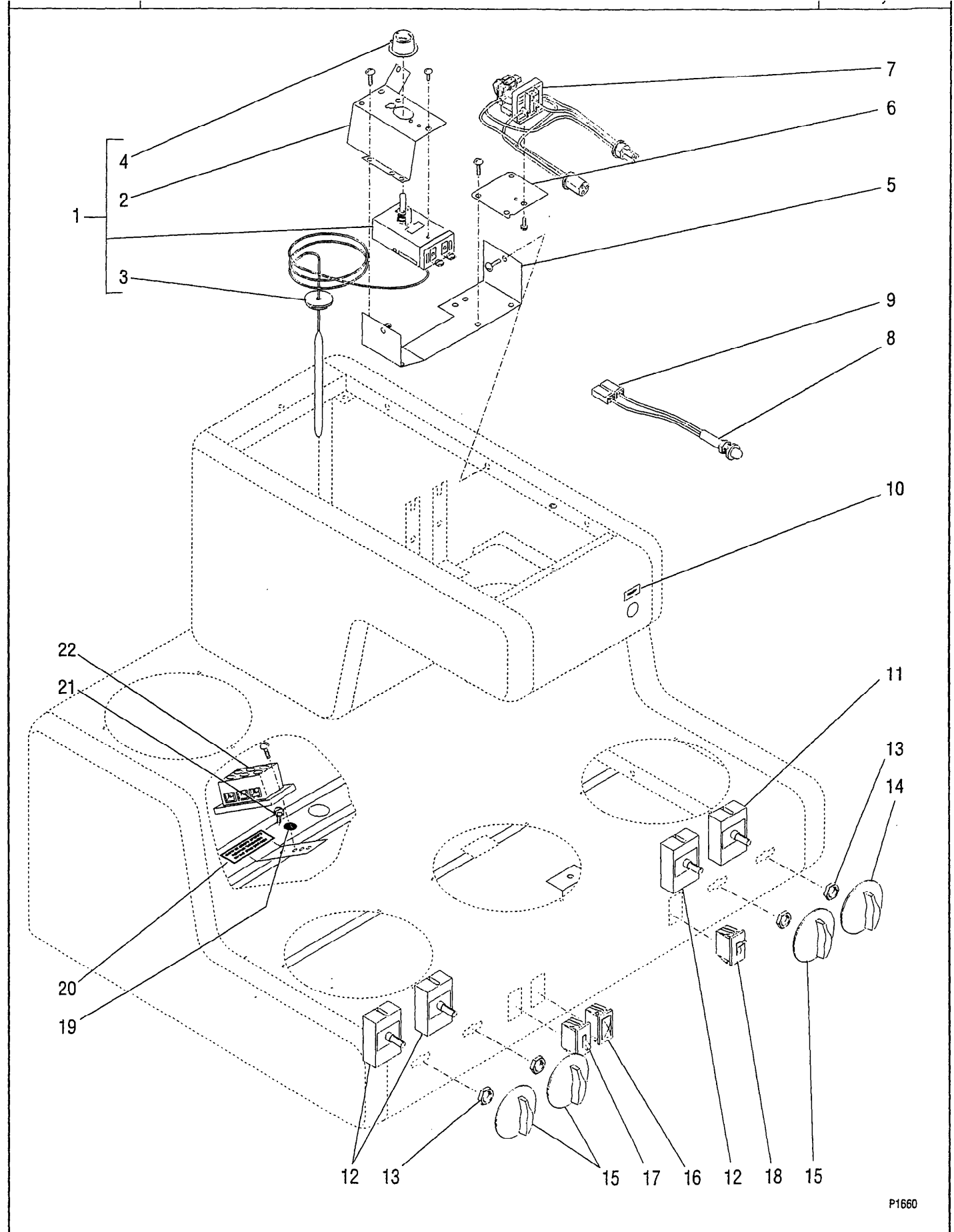
(Continued)



P1659

ELECTRICAL & OPERATING CONTROLS (Model OL)

ITEM	PART NO.	QTY.	DESCRIPTION
23	06064.0000	1	Decal, Cord Warning (OL15 only)
24	03820.0000	1	Lead, Solenoid Jumper
25	21016.0028	1	Lead, BLK 27.0"
26	21016.0029	1	Lead, BLU/BLK 23.0"
27	05116.0000	1	Harness, Main (Models OL15 & 20)
	05112.0000	1	Harness, Main (Model OL35)
	05118.0000	1	Harness, Main (Model OL35A)
	22399.0000	1	Harness, Main (Model OL25B)
28	21016.0011	1	Lead, GRN/YEL 15.0" (Model OL35A)
29	21016.0027	1	Lead, GRN/YEL 26.0" (Model OL35A)
30	21016.0007	1	Lead, BLU/BLK 23.0" (Model OL35B)
31	21016.0155	1	Lead, BLK 27.0" (Model OL35B)
32	22362.0000	1	Harness, Ready Light (Model OL35B)
33	04243.0000	2	Terminal Housing (Model OL35B)
34	21012.0062	1	Lead, BLK 10.0" (Model OL25B)
35	21012.0064	1	Lead, BLK 10.0" (Model OL25B)
36	21012.0066	1	Lead, WHT 9.0" (Model OL25B)
37	21012.0067	1	Lead, WHT 9.0" (Model OL25B)
38	22356.0000	1	Lamp Assy, Ready (Model OL25B)
39	04243.0000	2	Terminal Housing (Model OL25B)

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RL)****OL, RL
OT, RT**

P1660

ELECTRICAL & OPERATING CONTROLS (Model RL)

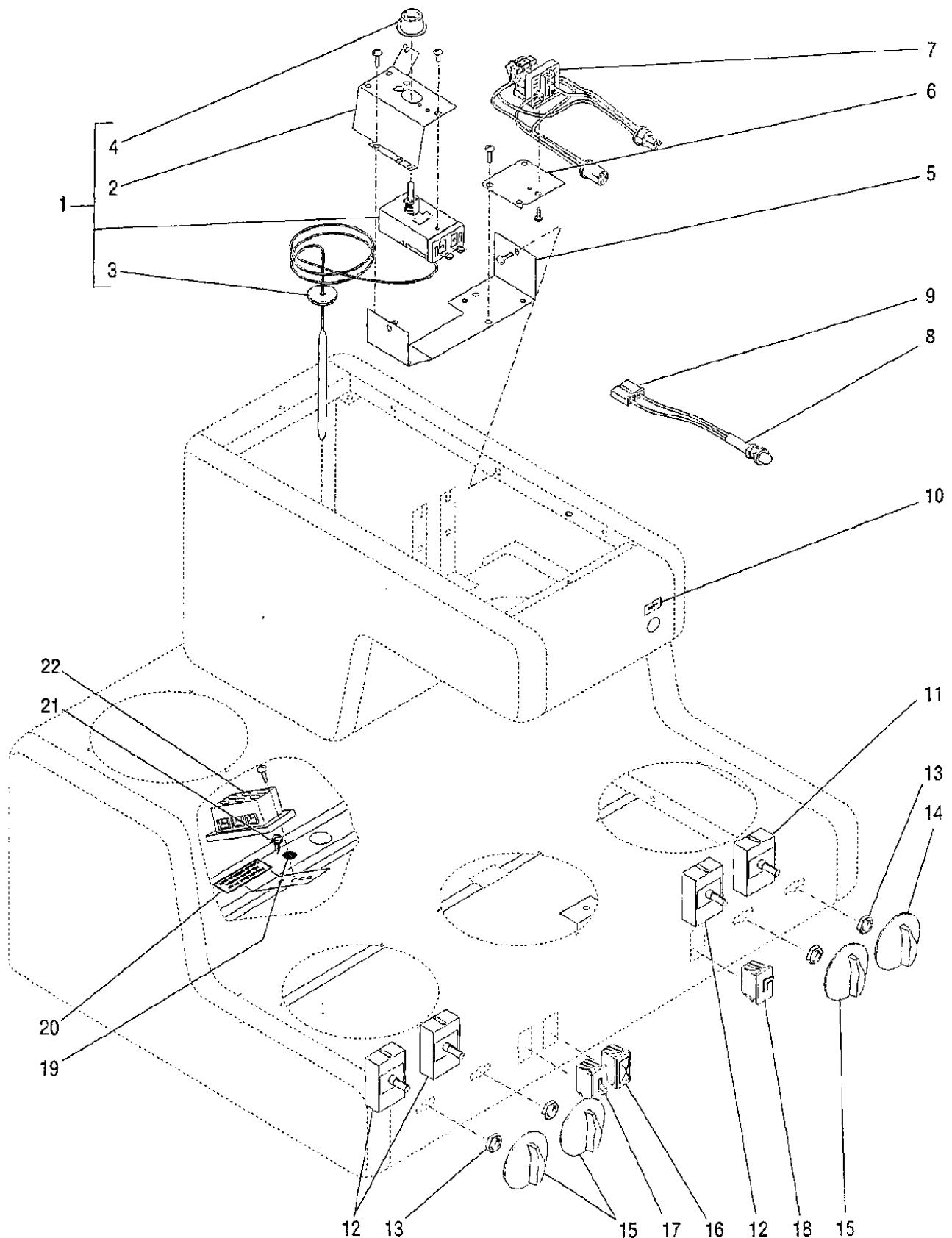
Part I

ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 thru 4)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	20771.0001	1	Bracket
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
3	07073.0000	1	Grommet
4	00720.0000	1	Knob
5	05089.0000	1	Bracket, Component Mounting
	01315.0000	1	Screw, TRH PHH #8-32 x .375"
6	05000.0000	1	Plate
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
7	02056.0000	1	Relay (120V)
	01977.0000	1	Relay (240V)
	02328.0000	1	Screw, PNH SLTD #6-32 x .375"
8	12984.0003	1	Lamp Assy, Ready (Model RL35B only)
9	04243.0000	2	Terminal Housing (Model RL35B only)
10	20749.0000	1	Decal, READY (Model RL35B only)
11	01053.0000	1	Switch, Rotary OFF/LO/MED/HI (Models with High Heat Warmer)
12	01052.0000	4	Switch, Rotary ON/OFF (One less used on models with High Heat Warmer)
13	00990.0000	4	Nut, Hex .375-24"
14	01055.0000	1	Knob, OFF/LO/MED/HI (Models with High Heat Warmer)
15	01054.0000	4	Knob, ON/OFF (One less used on models with High Heat Warmer)
16	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
17	01186.0000	1	Switch, ON/OFF
18	01061.0000	1	Switch, MOMENTARY START
19	00824.0000	1	Decal, Grounding (Model RLA only)
20	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO
21	01309.0000	1	Screw, Harness Grounding
22	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01317.0000	2	Screw, TRH PHH #8-32 x .50"

(Continued)

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RL)****OL,RL
OT,RT**

(Continued)



P166C

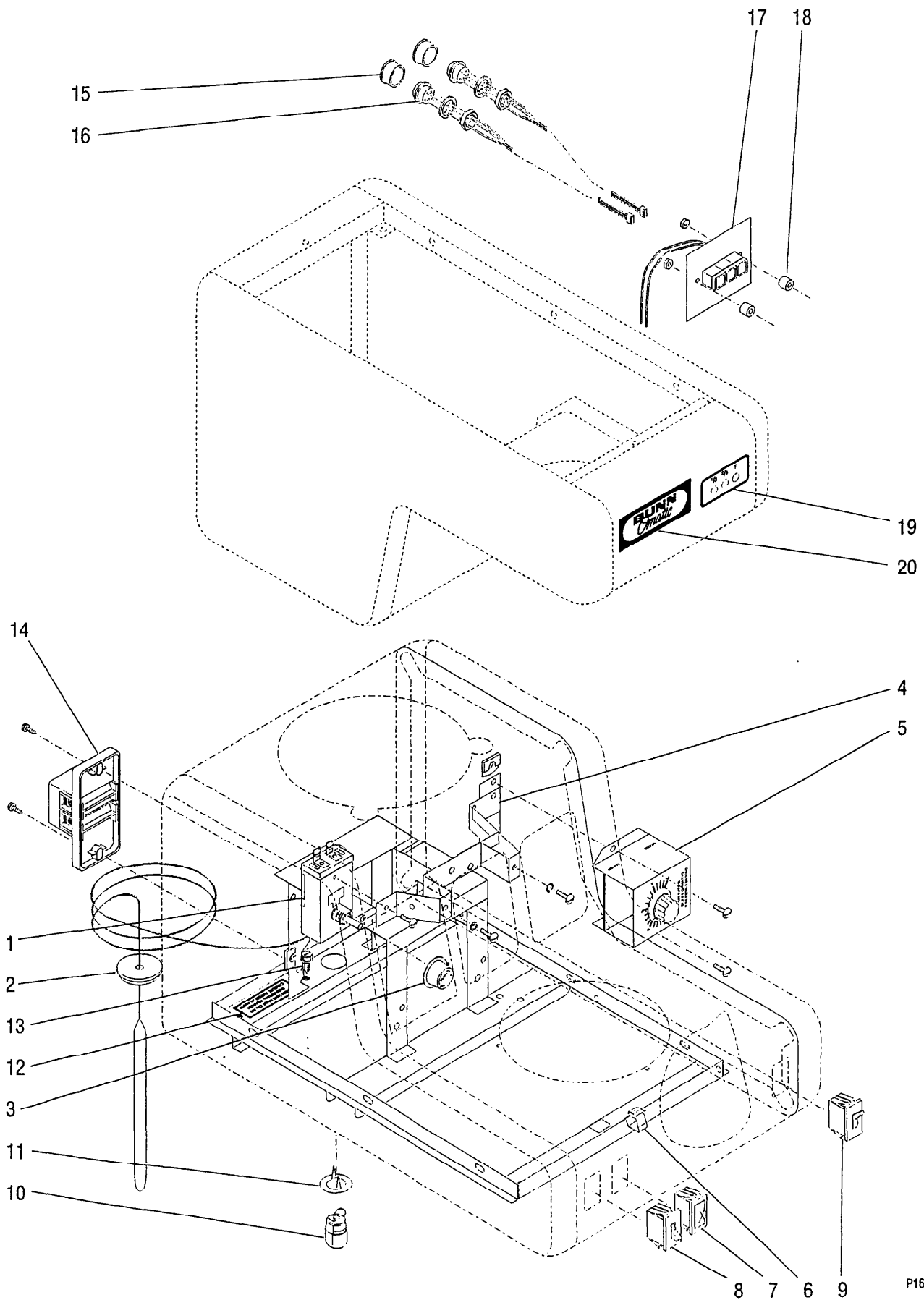
ELECTRICAL & OPERATING CONTROLS (Model RL)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION
------	----------	------	-------------

The following items are not illustrated

23	05113.0000	1	Harness, Main (Model RL)(Models with High Heat Warmer)
	22360.0000	1	Harness, Main (Model RL)(Models without High Heat Warmer)
	05117.0000	1	Harness, Main (Models RLA & RLB)(Models with High Heat Warmer)
	05117.0002	1	Harness, Main (Models RLA & RLB)(Models without High Heat Warmer)
24	21016.0028	1	Lead, BLK 27.0"
25	21016.0029	1	Lead, BLU/BLK 23.0"
26	03820.0000	1	Lead, Solenoid Jumper
27	22354.0000	1	Wire, Ground (Model RLA)
28	22362.0000	1	Harness, Ready Light (Model RL35B)
29	21016.0155	1	Lead, BLK 27.0"
30	21016.0007	1	Lead, BLU/BLK 23.0"

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model OT)****OL,RL
OT,RT**

P1661

ELECTRICAL & OPERATING CONTROLS (Model OT)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 & 3)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	07073.0000	1	Grommet
3	00720.0000	1	Knob
4	04752.0000	1	Bracket, Component Mounting
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
	00970.0000	2	Nut, KEPS #8-32
5	02235.1000	1	Timer, 120V
	02235.1009	1	Timer, 240V
	02235.1036	1	Timer, 120V (OT35 w/Grinder Interface)
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
	00912.0000	2	Fastener, "J" Type #8-32
6	00927.0000	1	Clip, Cable
7	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
8	01186.0000	1	Switch, ON/OFF
9	01061.0000	1	Switch, MOMENTARY START
10	01666.0000	1	Bushing, Strain Relief (Model OT15 only)
11	00715.0000	1	Washer, Strain Relief (Model OT15 only)
12	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO (Not Applicable to model OT15)
13	01309.0000	1	Screw, Harness Grounding
14	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01370.0000	2	Screw, PNH SLTD #8-32 x .75"
	00912.0000	2	Fastener, "J" Type #8-32
15	27657.0000	2	Cap, Plastic (OT35 w/Grinder Interface)
16	05187.0000	2	Harness (OT35 w/Grinder Interface)
17	05178.0000	1	Switch, Control Board (OT35 w/Grinder Interface)
	00973.0000	2	Nut, KEPS #6-32
18	01533.0002	2	Spacer (OT35 w/Grinder Interface)
19	05177.0000	1	Decal, Switch (OT35 w/Grinder Interface)
20	00875.0000	1	Decal, BUNN-O-MATIC (OT35 w/Grinder Interface)
The following items are not illustrated			
21	01668.0000	2	Wire Nut, ORN (OT35 w/Grinder Interface)
22	05186.0000	1	Harness (OT35 w/Grinder Interface)

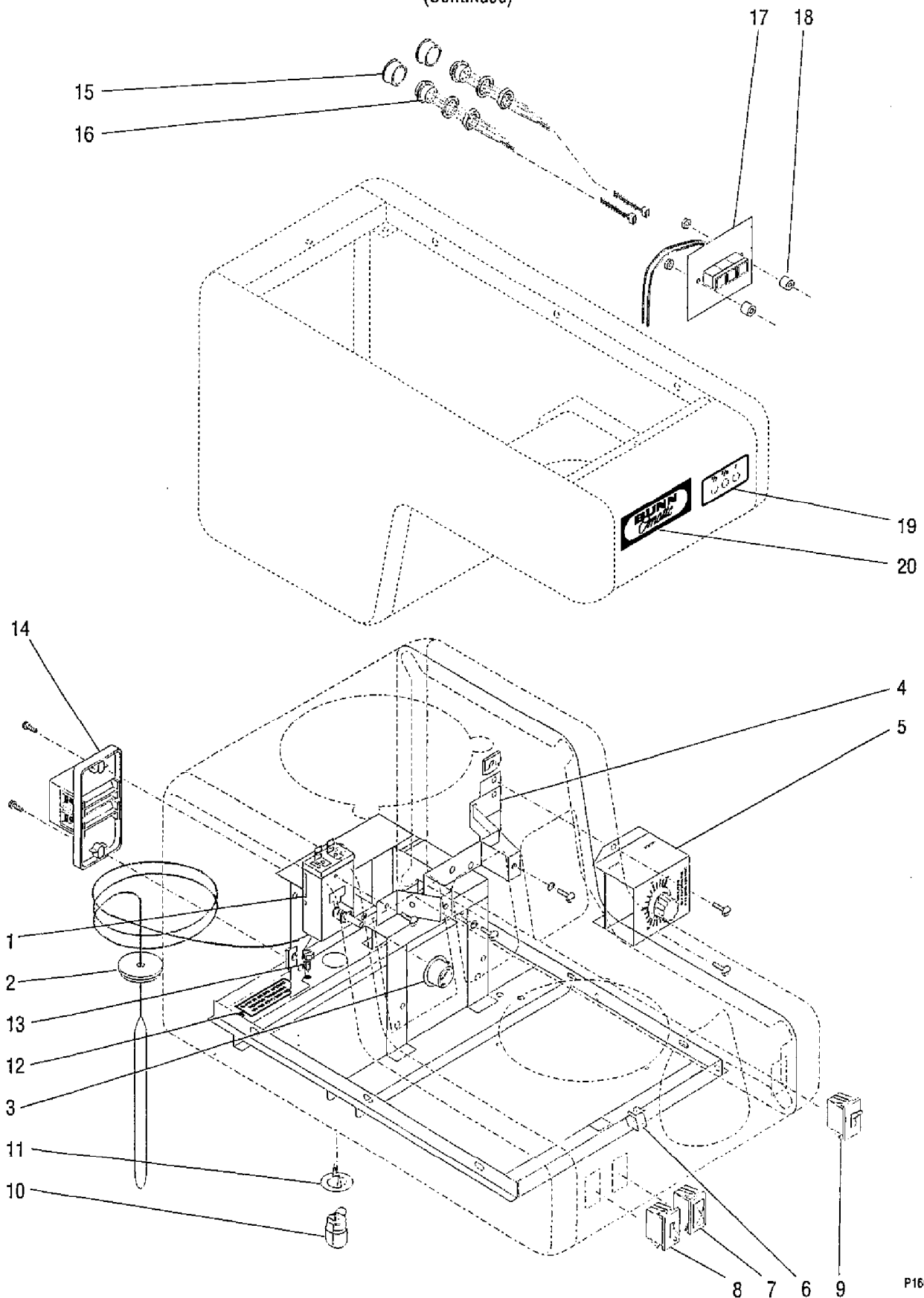
(Continued)

BUNN®

ELECTRICAL & OPERATING CONTROLS (Model OT)

**OL,RL
OT,RT**

(Continued)



P1661

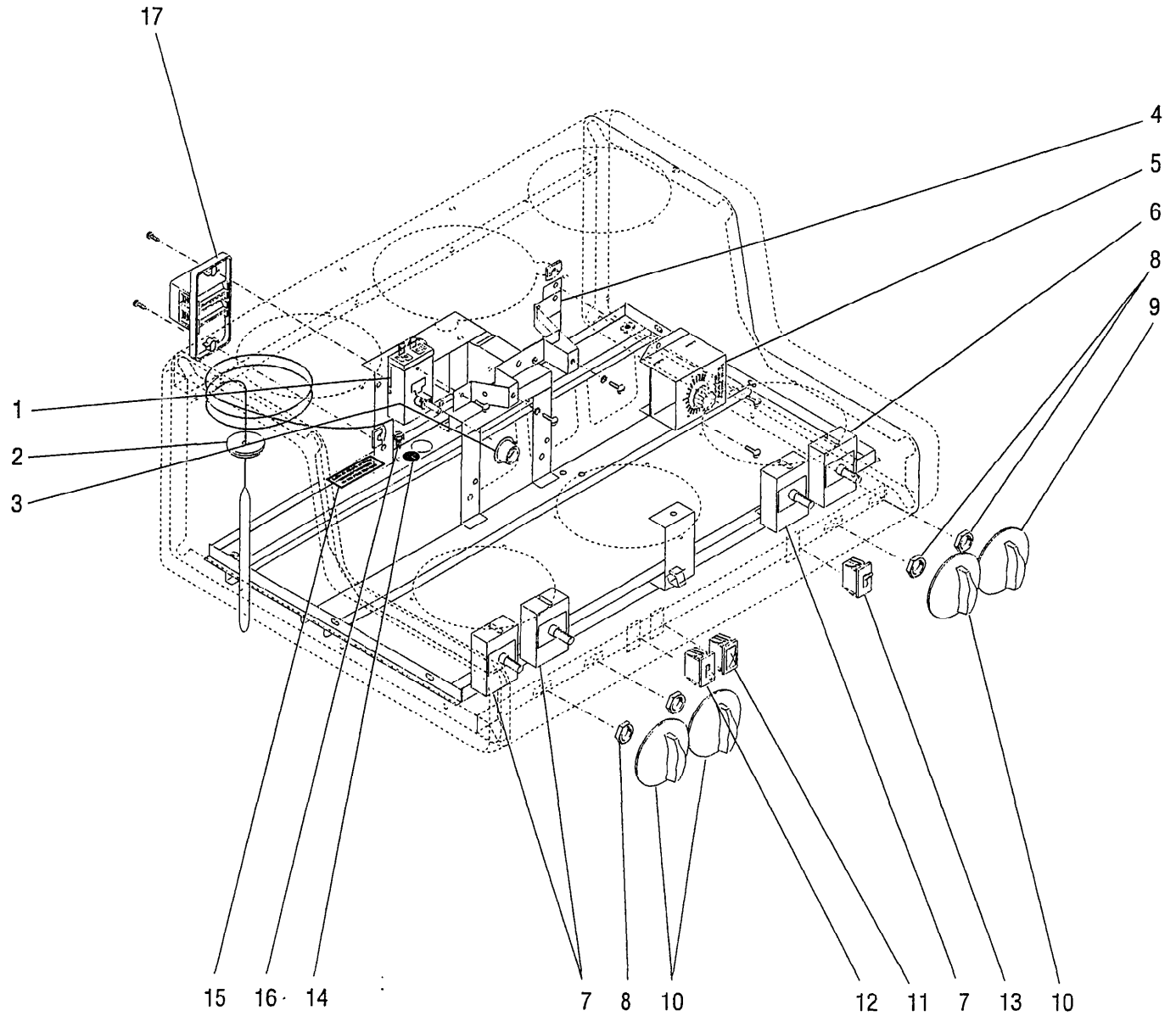
ELECTRICAL & OPERATING CONTROLS (Model OT)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION
23	01870.0000	1	Harness, Main (Models OT15 & 20)
	01869.0000	1	Harness, Main (Model OT35)
	22476.0000	1	Harness, Main (OT35 w/Grinder Interface)
24	04513.0000	1	Power Cord (OT15 only)
25	06064.0000	1	Decal, Cord Warning (OT15 only)
26	21016.0028	1	Lead, BLK 27.0"
27	21016.0029	1	Lead, BLU/BLK 23.0"

BUNN®

ELECTRICAL & OPERATING CONTROLS (Model RT)

OL,RL
OT,RT

P1662

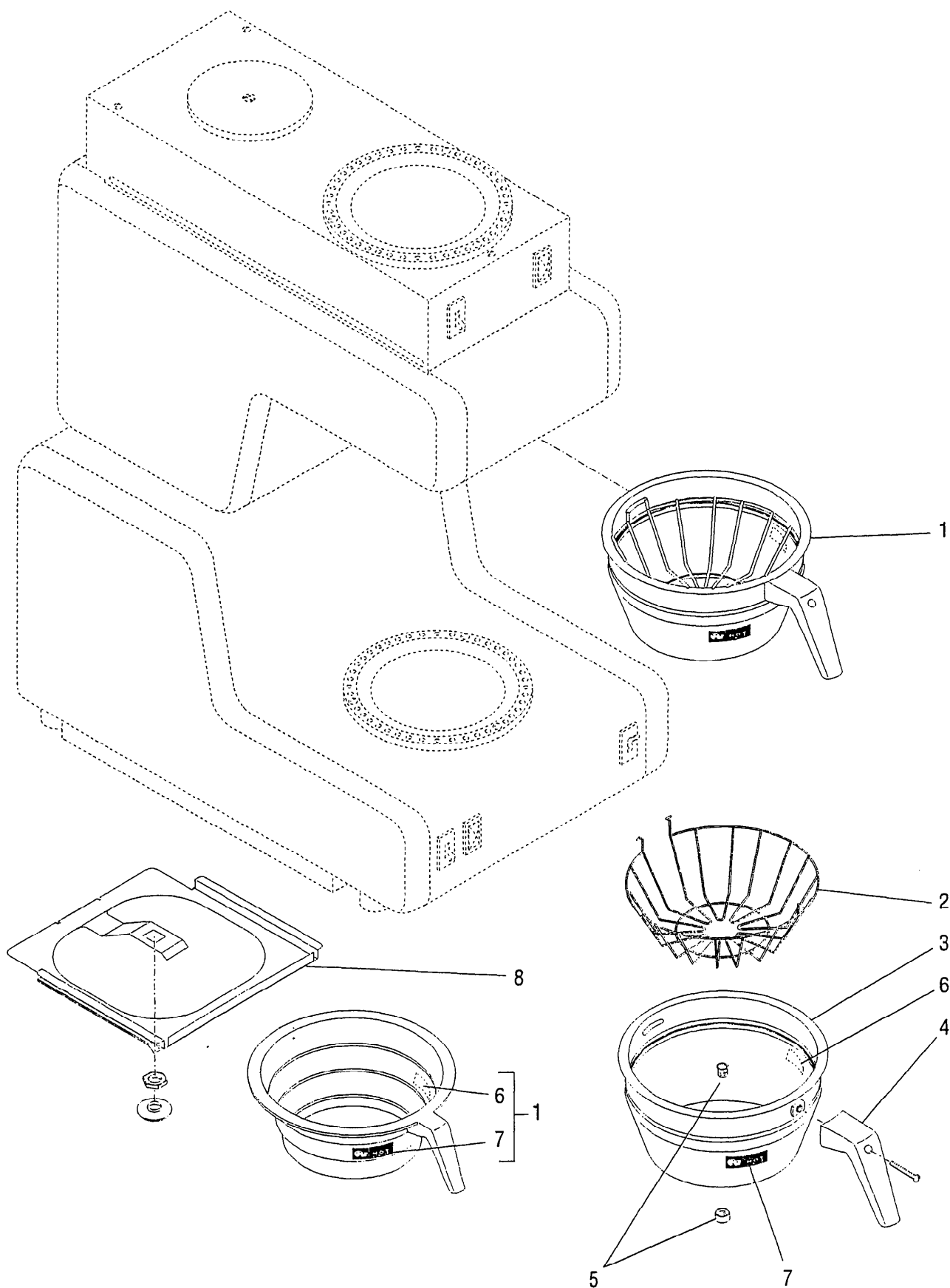
ELECTRICAL & OPERATING CONTROLS (Model RT)

Part I

ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 & 3)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	07073.0000	1	Grommet
3	00720.0000	1	Knob
4	04752.0000	1	Bracket, Component Mounting
	01315.0000	2	Screw, TRH PNH #8-32 x .375"
	01519.0000	2	Lockwasher #8
	00970.0000	2	Nut, KEPS #8-32
5	02235.1000	1	Timer, 120V
	02235.1009	1	Timer, 240V
	01315.0000	2	Screw, TRH PNH #8-32 x .375"
	00912.0000	2	Fastener, "J" Type #8-32
6	01053.0000	1	Switch, Rotary OFF/LO/MED/HI (Models with High Heat Warmer)
7	01052.0000	4	Switch, Rotary ON/OFF (One less used on models with High Heat Warmer)
8	00990.0000	4	Nut, Hex .375-24"
9	01055.0000	1	Knob, OFF/LO/MED/HI (Models with High Heat Warmer)
10	01054.0000	4	Knob, ON/OFF (One less used on models with High Heat Warmer)
11	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
12	01186.0000	1	Switch, ON/OFF
13	01061.0000	1	Switch, MOMENTARY START
14	00824.0000	1	Decal, Grounding (Model RTA only)
15	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO
16	01309.0000	1	Screw, Harness Grounding
17	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01370.0000	2	Screw, PNH SLTD #8-32 x .75"
	00912.0000	2	Fastener, "J" Type #8-32

The following items are not illustrated

18	21016.0028	1	Lead, BLK 27.0"
19	21016.0029	1	Lead, BLU/BLK 23.0"
20	01825.0000	1	Harness, Main, 120V (Models RT & RTF) (Models with High Heat Warmer)
	01825.0002	1	Harness, Main, 120V (Models RT & RTF) (Models without High Heat Warmer)
	22430.0000	1	Harness, Main, 120V (Model RT Galley) (Models with High Heat Warmer)
	22430.0002	1	Harness, Main, 120V (Model RT Galley) (Models without High Heat Warmer)
	01826.0000	1	Harness, Main, 240V (Model RTA) (Models with High Heat Warmer)
	01826.0002	1	Harness, Main, 240V (Model RTA) (Models without High Heat Warmer)
21	22354.0000	1	Wire, Ground (Model RTA)

BUNN®**FUNNELS & BASKETS****OL,RL
OT,RT**

P1663

FUNNELS & BASKETS

ITEM	PART NO.	QTY.	DESCRIPTION
1	20217.0000	1	Funnel, SST w/Black Handle (7.625" Dia)(Includes items 2 thru 5)
	20217.0001	1	Funnel, SST w/Orange Handle (7.625" Dia)(Includes items 2 thru 5)
	20583.0002	1	Funnel, Smoke Plastic (7.25" Dia)(Includes items 6 & 7)
	29351.0000	1	Funnel, Smoke Plastic (7.625" Dia)(Includes items 6 & 7)
2	20247.0000	1	Basket, Filter
3	28554.0000	1	Funnel w/Decals (Includes items 6 & 7)
4	20244.1000	1	Handle Kit, Black (Includes screw)
	20244.1001	1	Handle Kit, Orange (Includes screw)
	01331.0002	1	Screw, Round Head #10-32 x 1.50"
5	01031.0000	1	Funnel Tip Kit
6	03408.0002	1	Decal, WARNING-REMOVE FUNNEL
7	03409.0002	1	Decal, WARNING-HOT LIQUID
8	26723.0000	1	Adapter, Funnel (For use with 7.25" Dia Funnel)

NUMERICAL INDEX

Part I

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
00225.1001	25	01054.0000	33,41	01522.0000	15	04243.0000	31,33
00305.0000	21	01055.0000	33,41	01527.0000	13	04314.0001	29,33,37,41
00310.0000	21	01061.0000	29,33,37,41	01532.0000	19,23	04513.0000	29,39
00310.0002	21	01075.0000	15,17	01533.0002	37	04626.0000	15,17
00398.0002	21,23	01082.0000	15,17	01666.0000	29,37	04636.1000	17
00400.0001	17	01085.0002	19,21	01668.0000	37	04637.1000	17
00402.0001	19,21,23	01088.0000	25,29,33,37,41	01825.0000	41	04752.0000	37,41
00406.0001	9,11,17	01089.0000	25,29,33,37,41	01825.0002	41	04831.0000	13
00432.0001	19	01100.0000	19,21	01826.0000	41	04970.0000	11
00458.0001	19	01101.0000	19,21	01826.0002	41	04974.0000	9
00459.0001	19	01104.0000	19,21	01860.0000	25,29	05000.0000	29,33
00462.0001	5,7	01106.0000	29,33,37,41	01860.0001	25,29	05005.0000	7,11
00463.0000	19	01106.0001	29,33,41	01869.0000	39	05011.0000	23
00484.0001	23	01111.0000	19,21	01870.0000	39	05014.0000	5,9
00606.0000	5,7,9,11	01111.0002	19,21	01907.0000	27	05016.0000	5,7,9,11
00656.0000	5,7,9,11	01116.0000	19,21	01928.0000	15,17	05017.0000	5,7,9,11
00658.0000	5,7,9,11	01117.0000	21	01951.0000	25,27	05023.1000	9
00688.0000	7,11	01119.0000	19	01951.0001	25	05025.1000	9,11
00715.0000	5,9,29,37	01138.0000	19	01975.0000	19,21	05025.0002	11
00720.0000	29,33,37,41	01139.0000	19	01977.0000	29,33	05027.1000	11
00751.0000	5,7,9,11	01143.0000	25,27	02056.0000	29,33	05032.1000	13
00752.0000	5,7,9,11	01154.0001	21	02235.1000	37,41	05033.1000	13
00754.0001	5,7,9,11	01155.0000	21	02235.1009	37,41	05036.1000	13
00774.0000	9,11	01161.0000	27	02235.1036	37	05037.1000	13
00803.0000	7	01171.0001	21	02308.0000	13,19,29,33,37	05038.1000	13
00804.0000	25	01186.0000	25,29,33,37,41	02310.0000	5,7,9,11	05039.0000	13
00822.0000	11	01189.0000	7,25	02328.0000	29,33	05067.0000	15
00823.0000	5,7,9,11	01197.0000	27	02328.0003	29,33,37,41	05070.0000	15
00824.0000	29,33,41	01198.0000	27	02434.1000	5,7,9,11,15	05078.0000	13
00831.0000	5,7,9,11	01227.0000	25	02713.0000	13	05082.0000	13
00875.0000	9,11,23,37	01303.0000	25,27	02745.0000	13	05084.0000	13
00908.0000	13,15,17	01304.0000	27	02746.0000	13	05089.0000	29,33
00909.0000	27	01309.0000	29,33,37,41	02747.0000	13	05092.1000	7
00910.0000	27	01311.0000	5,7,9,11	02755.1000	13	05096.0000	19
00912.0000	7,25,37,41	01315.0000	5,7,9,11	02756.1000	13	05101.0000	7
00916.0000	25,27	01315.0000	29,33,41	02775.0000	13	05102.0000	5
00917.0000	5,7,9,11	01317.0000	29,33	02817.0000	25,27	05102.0001	5
00927.0000	5,9,29,37	01318.0000	9,11	02858.0000	23	05103.1000	5,7
00929.0001	13,15,17	01320.0000	5,7,9,11	03311.0000	27	05103.1001	5
00932.0000	15	01322.0000	11	03312.0000	27	05103.1002	5,7
00935.0001	15	01323.0000	25	03408.0002	43	05105.0000	5
00942.0000	15,17	01326.0000	21	03409.0002	43	05106.0000	13
00943.0000	13,17	01327.0000	19	03652.0000	25	05106.0001	13
00946.0000	13	01331.0000	5,7,9,11,29	03656.0000	25,27	05108.0000	13
00970.0000	13,15,25	01331.0002	43	03697.0000	25,27	05110.1000	13
00970.0000	27,37,41	01332.0000	27	03807.0000	13	05112.0000	31
00971.0000	5,7,9,11	01370.0000	15,37,41	03810.1000	25	05113.0000	35
00973.0000	37	01371.0000	7,25	03811.1000	7	05116.0000	31
00978.0000	5,7,9,11	01377.0000	7,25	03813.0000	25	05117.0000	35
00985.0000	29,33,37,41	01502.0000	19	03820.0000	19,31,35	05117.0002	35
00990.0000	33,41	01503.0000	27	03989.0000	13	05118.0000	31
01031.0000	43	01512.0000	5,7,9,11,21	04129.0000	17	05119.0000	19
01052.0000	33,41	01516.0000	5,7,9,11,25	04221.0000	17	05177.0000	37
01053.0000	33,41	01519.0000	41	04236.1000	17	05178.0000	37

NUMERICAL INDEX

Part I

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
05186.0000	37	20747.0000	23				
05187.0000	37	20749.0000	29,33				
05194.0000	9	20768.0000	13				
05212.0000	25,27	20771.0001	29,33				
05515.0000	17	20942.1000	13				
05518.0000	17	21012.0062	31				
05533.0000	17	21012.0064	31				
05533.0002	17	21012.0066	31				
05553.0000	17	21012.0067	31				
05682.1000	17	21016.0007	31,35				
05683.1000	17	21016.0011	31				
05684.0000	17	21016.0027	31				
05717.0000	25	21016.0028	31,35,39,41				
06064.0000	31,39	21016.0029	31,35,39,41				
06335.0004	29	21016.0122	17				
07038.0000	29,33,37,41	21016.0155	31,35				
07073.0000	29,33,37,41	21180.0000	19,21				
10006.0000	7	21181.0000	19,21				
10007.0000	25	22249.0000	19,21				
10277.0000	11	22293.0000	19,21				
10278.0000	9	22351.1000	7,11				
11440.0011	25	22354.0000	35,41				
12364.0000	5,7,9,11	22356.0000	31				
12687.0000	17	22357.0002	11				
12688.0000	17	22357.0003	9				
12689.1000	17	22358.1000	5,9				
12747.0000	15	22358.1001	5,9				
12915.0000	23	22360.0000	35				
12984.0003	33	22362.0000	31,35				
12984.0004	29	22399.0000	31				
13042.0001	25,27	22428.0000	11				
13053.0000	23	22430.0000	41				
13054.0000	23	22430.0002	41				
13055.0000	23	22476.0000	39				
13056.0000	23	23721.0000	19,21				
13057.0000	23	23820.0000	19,21				
13058.0000	23	26723.0000	43				
13059.0000	23	27657.0000	37				
13060.0000	23	28479.0000	19,21				
13061.0000	23	28480.0000	19,21				
20201.4300	19	28481.0000	19,21				
20201.5600	23	28554.0000	43				
20211.0100	17	29329.1000	15,17				
20217.0000	43	29351.0000	43				
20217.0001	43	32423.0000	11				
20244.1000	43	32424.0000	7				
20244.1001	43						
20247.0000	43						
20526.1195	21						
20528.1195	21						
20554.0001	21						
20581.0001	19						
20583.0002	43						
20726.0000	23						

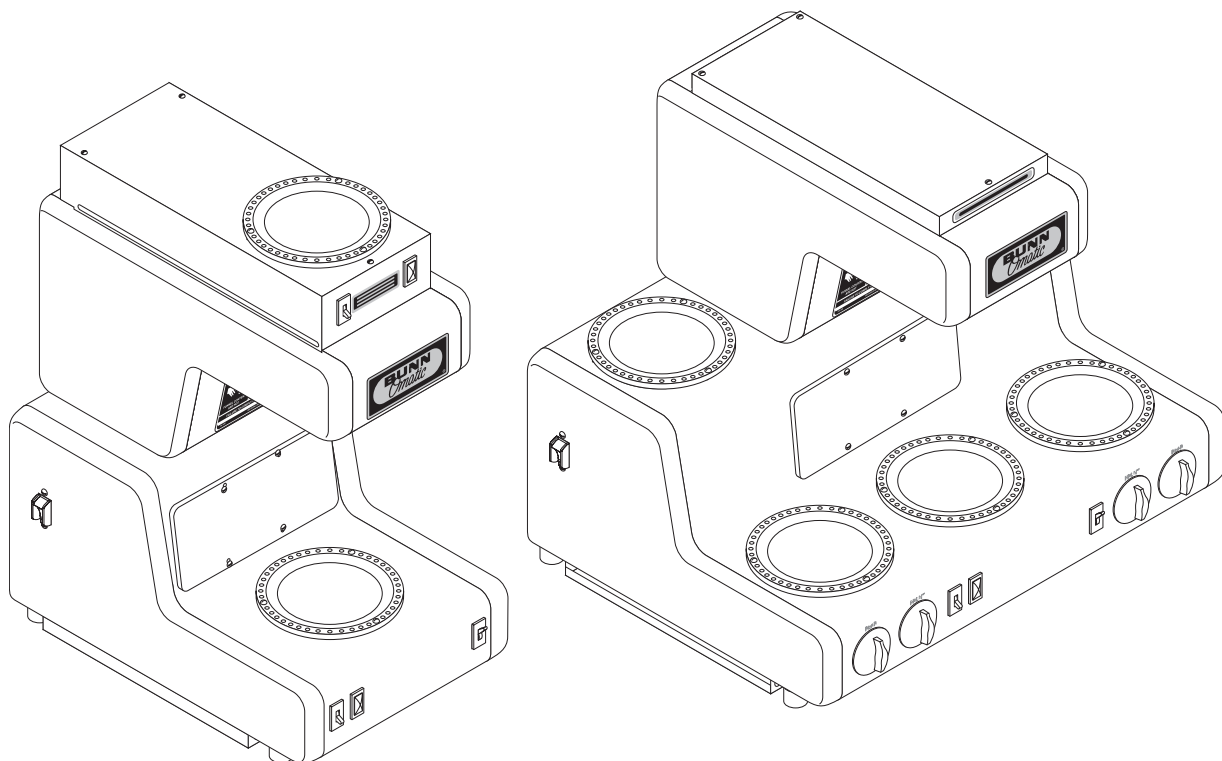
Part II

Operating & Service Manual with Illustrated Parts Catalog for Models
OT & RT, Serial Numbers RT00005364 and up with Digital Timer

BUNN®

OT & RT

(S/N RT00005364 & up)



OPERATING & SERVICE MANUAL

BUNN-O-MATIC CORPORATION

POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS 62708-3227

PHONE: (217) 529-6601 FAX: (217) 529-6644

To ensure you have the latest revision of the manual or to obtain the illustrated parts catalog, please visit the Bunn-O-Matic website, at www.bunn.com. This is absolutely FREE, and the quickest way to obtain the latest catalog and manual updates. Contact Bunn-O-Matic Corporation at 1-800-286-6070 to obtain a paper copy of the required Illustrated Parts Catalog mailed via U.S. Postal Service.

BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) All equipment other than as specified below: 2 years parts and 1 year labor.
- 2) Electronic circuit and/or control boards: parts and labor for 3 years.
- 3) Compressors on refrigeration equipment: 5 years parts and 1 year labor.
- 4) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis: parts and labor for 3 years or 30,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

BrewWISE, BUNN Gourmet Ice, BUNN Pour-O-Matic, BUNN, Bunn-OMatic, Bunn-O-Matic, BUNNlink, BUNNserve, BUNN Espresso, DBC, Dr. Brew, Dual, EasyClear, EasyGard, Easy Pour, FlavorGard, Gourmet Ice, Gourmet Juice, High Intensity, IMIX, Infusion Series, Legendary for Quality, The Mark of Quality in Beverage Equipment Worldwide, My Café, PowerLogic, Safety-Fresh, Single, Smart Funnel, Smart Hopper, Soft Heat, SplashGard, System III, ThermoFresh, AXIOM, Beverage Profit Calculator, Beverage Bar Creator, BrewLOGIC, BrewMETER, BrewWIZARD, BUNNSERVE, BUNNsource, Coffee At Its Best, Coffee Spot, Cool Froth, Digital Brewer Control, Earth-1st, Earth 1st, Earth First, Intellisteam, Nothing Brews Like a BUNN, Pouring Profits, Pulse Wave, Quality Beverage Equipment Worldwide, Scale-Pro, Signature Series, Silver Series, Smart Heat, SmartWAVE, Tea At Its Best, The Horizontal Red Line, Titan, Ultra, are either trademarks or registered trademarks of Bunn-O-Matic Corporation.

CONTENTS

Introduction	2
User Notices	3
Electrical Requirements	4
Plumbing Requirements	4
Initial Set-Up	5
Adjusting Brew Volumes	6
Operating Controls	6
Coffee Brewing	7
Cleaning	7
Troubleshooting	8
Service	12
Wiring Diagrams	28

INTRODUCTION

This equipment will brew a half-gallon batch of coffee into an awaiting decanter at the press of a button. The OT has two and the RT has five warmers to keep the beverage at the right temperature, on the RT one of which is capable of heating water to boiling. The brewer is only for indoor use on a sturdy counter or shelf.

USER NOTICES

Carefully read and follow all notices on the equipment and in this manual. They were written for your protection. All notices on the equipment should be kept in good condition. Replace any unreadable or damaged labels.

⚠ WARNING
<ul style="list-style-type: none"> ◆ Fill water tank before turning - on - thermostat or connecting appliance to power source. ◆ Use only on a properly protected circuit capable of the rated load. ◆ Electrically ground the chassis. ◆ Follow national/local electrical codes. ◆ Do not use near combustibles.
FAILURE TO COMPLY RISKS EQUIPMENT DAMAGE, FIRE, OR SHOCK HAZARD
READ THE ENTIRE OPERATING MANUAL BEFORE BUYING OR USING THIS PRODUCT
THIS APPLIANCE IS HEATED WHENEVER CONNECTED TO A POWER SOURCE
<small>00831.0000F 3/98 ©1998 BUNN-O-MATIC CORPORATION</small>

00831.0000

This equipment must be installed to comply with the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA). For models installed outside the U.S.A., comply with the applicable Plumbing /SanitationCode.

00656.0000

⚠ WARNING	
 <p>FUNNEL CONTENTS ARE HOT</p>	<p>DISCARD DECANTER IF:</p> <ul style="list-style-type: none"> • CRACKED • SCRATCHED • BOILED DRY • HEATED WHEN EMPTY USED ON HIGH FLAME OR EXPOSED ELECTRIC ELEMENTS
<p>READ THE ENTIRE OPERATING MANUAL BEFORE USING THIS PRODUCT</p> <p>FAILURE TO COMPLY RISKS INJURY</p>	
<small>PN: 00658.0000F 6/98 © 1985 BUNN-O-MATIC CORPORATION</small>	

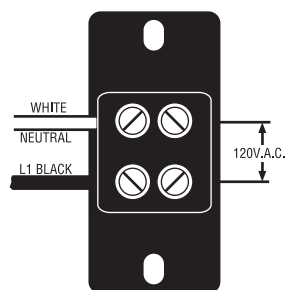
00658.0000

⚠ WARNING
<p>To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside. Authorized service personnel only. Disconnect power before servicing.</p>

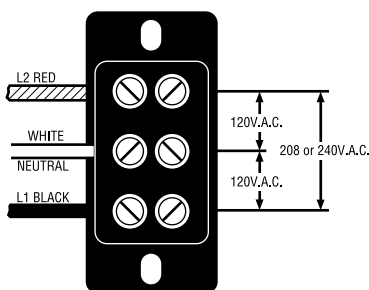
37881.0000

ELECTRICAL REQUIREMENTS

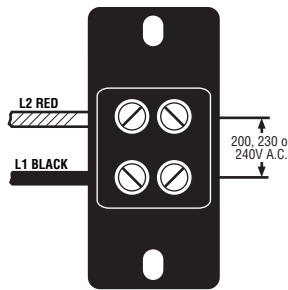
CAUTION - Do not connect the brewer to the power source until specified in Initial Set-Up.



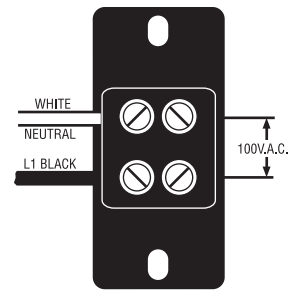
MODELS OT15 & 20 require 2-wire, grounded service rated 120 volts ac, 15 or 20 amp respectively, single phase, 60 Hz. Model 15 has an attached cordset.



MODELS OT35 & RT35 require 3-wire, grounded service rated 120/208 or 120/240 volts ac, 20 amp, single phase, 60 Hz.



MODELS OTA, RTA & RT35B require 2-wire, grounded service rated 240 volts ac or 200 volts ac, 20 amp single phase, 50 Hz.



MODEL RT requires 2-wire, grounded service rated 120 volt ac, 25 amp single phase, 50 Hz.

Electrical Hook-Up

Model OT15 has an attached cordset.

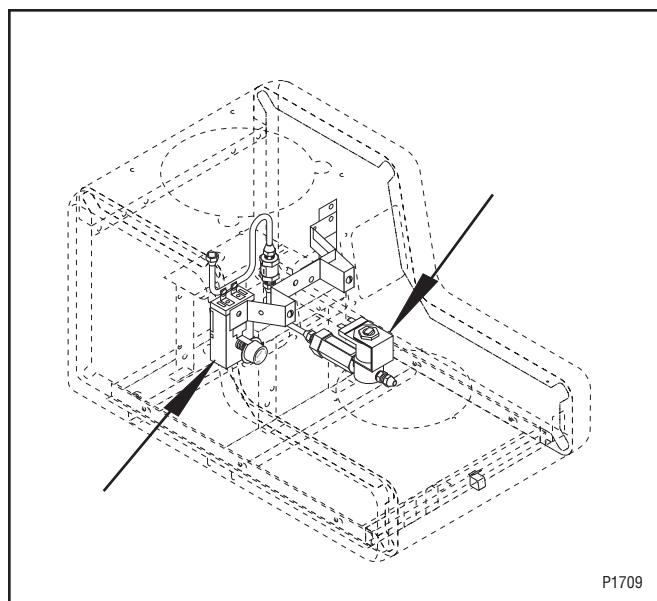
Models OT20, OT35, & RT35, proceed as follows:

CAUTION – Improper electrical installation will damage electronic components.

1. An electrician must provide electrical service as specified.
2. Using a voltmeter, check the voltage and color coding of each conductor at the electrical source.
3. Remove the front panel beneath the sprayhead and rotate the control thermostat knob fully counterclockwise to the “OFF” position and replace the panel.
4. Remove the rear panel, feed the cord through the strain relief, and connect it to the terminal block.
5. Connect the brewer to the power source and verify the voltage at the terminal block before proceeding. Replace the rear panel.
6. If plumbing is to be hooked-up later be sure the brewer is disconnected from the power source. If Plumbing has been hooked-up, the brewer is ready for Initial Set-Up.

PLUMBING REQUIREMENTS

This brewer must be connected to a **cold** water system with operating pressure between 20 and 90 psi from a 1/2” or larger supply line. A shut-off valve should be installed in the line before the brewer. Install a regulator in the line when pressure is greater than 90 psi to reduce it to 50 psi. The water inlet fitting is 1/4” flare.



NOTE - Bunn-O-Matic recommends 1/4” copper tubing for installations of less than 25 feet and 3/8” for more than 25 feet from the 1/2” water supply line. A tight coil of copper tubing in the water line will facilitate moving the brewer to clean the counter top. Bunn-O-Matic does not recommend the use of a saddle valve to install the brewer. The size and shape of the hole made in the supply line by this type of device may restrict water flow.

This equipment must be installed to comply with the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA). For models installed outside the U.S., you must comply with the applicable Plumbing/Sanitation Code for your area.

PLUMBING REQUIREMENTS (Cont.)

Plumbing Hook-Up

Model OT15 has an attached water strainer, proceed to step 2.

Models OT20, OT35, & RT35, proceed as follows:

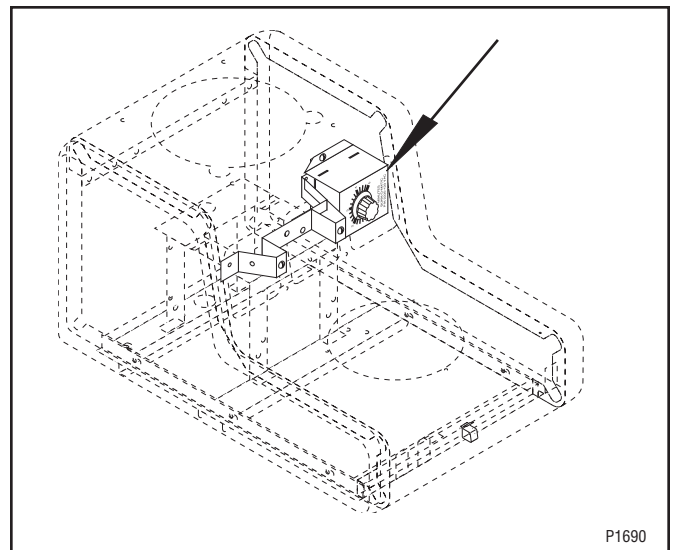
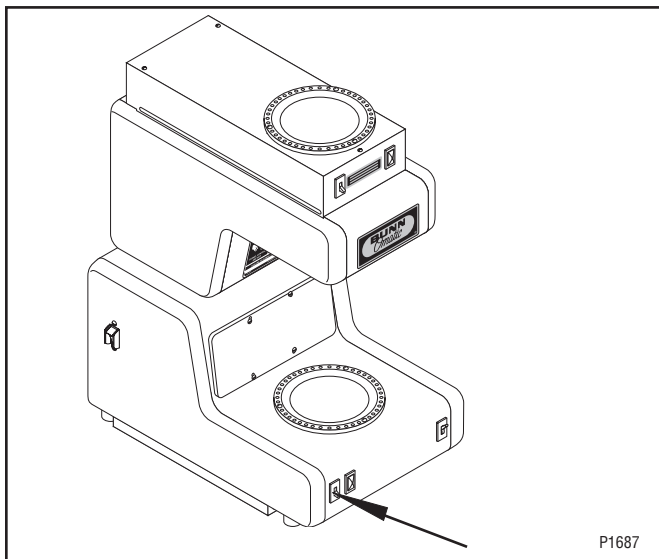
1. Remove the rear panel and bottom pan. Run the long piece of tubing from the strainer (supplied) under the brewer and attach it to the water inlet fitting on the solenoid. Reinstall the bottom pan and rear panel.
2. Flush the water line and securely attach it to the 1/4" flare fitting on the strainer.
3. Turn on the water supply.

INITIAL SETUP

CAUTION - The brewer must be disconnected from the power source throughout the initial set-up, except when specified in the instructions.

1. Remove the front panel.
2. Rotate the control thermostat knob fully counter-clockwise to the "OFF" position and replace the panel.
3. Insert an empty funnel into the funnel rails.
4. Place a decanter containing a small amount of water on the warmer beneath the funnel.
5. Connect the brewer to the power source, place the On/Off brew station warmer switch the upper position, and momentarily press the start switch. Water will begin flowing into the tank. When water stops flowing into the tank, initiate a second and a third brew cycle. During this third brew cycle the tank will fill to its capacity and the excess will flow from the spray-head, out of the funnel, and into the decanter.
6. Place the On/Off brew station warmer switch in the lower position.
7. Disconnect the brewer from the power source.
8. Remove the front panel.
9. Rotate the control thermostat knob fully clockwise to the "ON" position and replace the front panel.
10. Connect the brewer to the power source and wait approximately twenty minutes for the water in the tank to heat to the proper temperature. Some water will drip from the funnel during this time; this is due to expansion and should not occur thereafter.
11. Place an empty decanter under the funnel.
12. Place the On/Off brew station warmer switch in the upper position and momentarily press the start switch. Empty the decanter after water has stopped flowing from the funnel.
13. Allow the water in the tank to reheat to the proper temperature.
14. Place an empty decanter on the warmer and press the start switch. Check the water volume in the decanter after water has stopped flowing from the funnel. It should be 64 ounces.
15. If not, adjust the Timer as described in Adjusting Brew Volumes (page 6)
16. Repeat steps 13-15 until 64 oz water volume is achieved.

NOTE - The On/Off brew station warmer switch must be in the upper position to initiate and complete a brew cycle.



ADJUSTING BREW VOLUMES

CAUTION - Disconnect the power source from the brewer prior to the removal of any panel for the replacement or adjustment of any component.

NOTE: Prior to setting or modifying batch sizes, check that the brewer is connected to water supply, the tank is properly filled, and a funnel and server are in place.

1. **Modifying batch sizes.** To modify a batch volume, first check that the SET/LOCK switch is in the "SET" position on the circuit board.

To increase a batch size. Press and hold the START or BREW switch until three clicks are heard. Release the switch (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory) and press it again one or more times. Each time the switch is pressed, two seconds are added to the brew time period. Allow the brew cycle to finish in order to verify that the desired volume has been achieved.

To decrease a batch size. Press and release the START or BREW switch once for every two-second interval to be removed from the total brew time period; then immediately press and hold down the START or BREW switch until three clicks are heard. Release the switch. (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory). Allow the brew cycle to finish in order to verify that the desired volume has been achieved.

2. **Setting batch sizes.** To set a batch volume, first check that the SET/LOCK switch is in the "SET" position on the circuit board. Press and hold the START or BREW switch until three distinct clicks are heard, and then release the switch. (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory). View the level of the liquid being dispensed. When the desired level is reached, turn the ON/OFF switch to "OFF" (lower). The brewer remembers this volume and will continue to brew batches of this size until the volume setting procedure is repeated.

NOTE: When brewing coffee, batch volumes will decrease due to absorption by the coffee grounds.

3. **Setting programming disable feature.** If it becomes necessary to prevent anyone from changing brew times once programmed, you can set the SET/LOCK switch to the "LOCK" position. This will prevent any programming to be done until switch is once again placed in the "SET" position.

OPERATING CONTROLS

MODELS OT & RT

A. On/Off Brew Station Warmer Switch

Placing the switch in the upper position supplies power to the brew station warmer and enables brewing. Placing the switch in the lower position cuts power to the brew station warmer and stops brewing. Stopping a brew cycle after it has been started will not stop the flow of water into the funnel until the tank syphons down to its proper level.

NOTE - The On/Off brew station warmer switch must be in the upper position to initiate and complete a brew cycle.

B. On/Off Brew Station Warmer Indicator Lamp

Glowes whenever the On/Off brew station warmer switch is in the upper position showing that the warmer is on and that the automatic brew cycle can be started.

C. Start Switch

Starts a brew cycle when the On/Off brew station warmer switch is in the upper position.

D. Upper Warmer Switch

Placing the switch in the upper position supplies power to the upper warmer. Placing the switch in the lower position cuts power to the upper warmer.

E. Upper Warmer Indicator Lamp

Glowes whenever the upper warmer switch is in the upper position showing that the warmer is on.

F. Left Rear Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the left rear warmer. Rotating the knob to the "OFF" position cuts power to the left rear warmer.

G. Left Front Warmer Rotary Switch

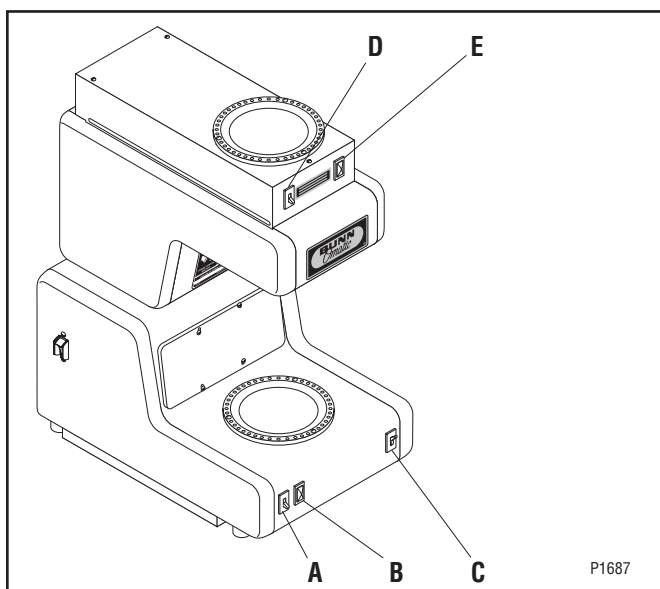
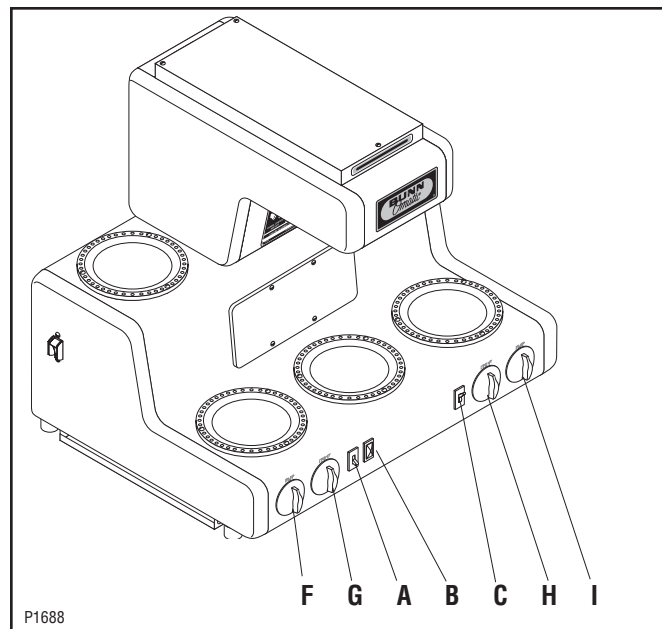
Rotating the knob to the "ON" position supplies power to the left front warmer. Rotating the knob to the "OFF" position cuts power to the left front warmer.

H. Right Front Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the right front warmer. Rotating the knob to the "OFF" position cuts power to the right front warmer.

I. Right Rear Warmer Rotary Switch

Rotating the knob to the "ON" position supplies power to the right rear warmer. Rotating the knob to the "OFF" position cuts power to the right rear warmer.

MODEL OT**MODEL RT****COFFEE BREWING**

Start each brew cycle with an empty, clean, half-gallon decanter.

1. Insert a BUNN® filter into the funnel.
2. Pour the fresh coffee into the filter and level the bed of grounds by gently shaking.
3. Slide the funnel into the funnel rails.
4. Place the On/Off brew station warmer switch in the upper position.
5. Momentarily press the start switch.
6. When brewing is completed, simply discard the grounds and filter.

CLEANING

1. The use of a damp cloth rinsed in any mild, non-abrasive, liquid detergent is recommended for cleaning all surfaces on Bunn-O-Matic equipment.
2. Check and clean the sprayhead. The sprayhead holes must always remain open.
3. With the sprayhead removed, insert the deliming spring (provided) all the way into the sprayhead tube. When inserted properly, no more than two inches of spring should be visible. Saw back and forth five or six times. Then, repeat this step for the air vent tube.

NOTE - In hard water areas, this may need to be done daily. It will help prevent liming problems in the brewer and takes less than a minute.

NEEDLE VALVE ADJUSTMENT (Models with Faucet)

This brewer is equipped with a unique faucet system allowing hot water to be drawn-off a cup-at-a-time for instant beverage needs, even while brewing.

WARNING - Disconnect the brewer from the power source before the removal of any panel or replacement of any component.

ADJUSTMENT

1. Disconnect the brewer from the power source and remove the front inspection panel located beneath the brew funnel.
2. Adjust the needle valve as required to increase or decrease the pressure of the hot water flowing from the faucet. Turn the propeller on the valve in a counterclockwise direction to increase the flow and in a clockwise direction to decrease the flow.
3. Reconnect the brewer to the power source and allow the water in the tank to heat to the proper temperature before operating the brewer.

TROUBLESHOOTING

A troubleshooting guide is provided to suggest probable causes and remedies for the most likely problems encountered. If the problem remains after exhausting the troubleshooting steps, contact the Bunn-O-Matic Technical Service Department.

- Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel.
- All electric components have 120 volt ac voltage on their terminals. Shorting of terminals or the application of external voltages may result in equipment failure.
- Intermittent operation of electronic equipment is unlikely. Component failure will normally be permanent. If an intermittent condition is encountered, the cause will likely be a switch contact or a loose connection at a terminal or crimp.
- Solenoid removal requires interrupting the water supply to the valve. Damage may result if solenoids are energized for more than ten minutes without a supply of water.
- The use of two wrenches is recommended whenever plumbing fittings are tightened or loosened. This will help to avoid twists and kinks in the tubing.
- Make certain that all plumbing connections are sealed and electrical connections tight and isolated.
- This brewer is heated at all times unless disconnected from the power source. Keep away from combustibles.

WARNING

- Exercise extreme caution when servicing electrical equipment.
- Disconnect the brewer from the power source when servicing, except when electrical tests are specified.
- Follow recommended service procedures
- Replace all protective shields or safety notices

Problem	Probable Cause	Remedy
Equipment will not operate.	1. No power or incorrect voltage	(A) Connect the brewer to the power source.
		(B) Check the terminal block for the proper voltages.
		(C) Check circuit breaker/fuse.
Brew cycle will not start.	1. No water	Check plumbing and shut-off valves.
	2. Water Strainer	(A) Direction of flow arrow must be pointing towards brewer.
		(B) Remove the strainer and check for obstructions. Clear or replace.
	3. Flow Control	(A) Direction of flow arrow must be pointing away from the solenoid.
		(B) Remove the control and check for obstructions. Clear or replace.

TROUBLESHOOTING (cont.)

Problem	Probable Cause	Remedy
Brew cycle will not start. (cont.)	4. On/Off Brew Station Warmer Switch	Refer to Service - On/Off Brew Station Warmer Switch for testing procedures. See page 18.
	5. Start Switch	Refer to Service - Start Switch for testing procedures. See page 23.
	6. Brew Timer	Refer to Service - Timer for testing procedures. See page 13 & 14.
	7. Solenoid Valve	Refer to Service - Solenoid Valve for testing procedures. See page 22.
Water flows into tank continuously (On/Off brew station warmer switch "OFF").	1. Solenoid Valve	Refer to Service - Solenoid Valve for testing procedures. See page 22.
Water flows into tank continuously (On/Off brew station warmer switch "ON").	1. Brew Timer	Refer to Service - Timer for testing procedures. See page 13 & 14.
Water is not hot.	1. Limit Thermostat	Refer to Service - Limit Thermostat for testing procedures. See page 21.
	CAUTION Do not eliminate or bypass limit thermostat. Use only B.O.M. replacement part #29329.1000	
	2. Control Thermostat	Refer to Service - Control Thermostat for testing procedures. See page 16.
	3. Tank Heater	Refer to Service - Tank Heater for testing procedures. See page 24.
Decanter warmer is not hot.	1. Warmer Switches	(A) The Warmer Switch(es) must be in the "ON" position for the warmer to operate. (B) Refer to Service - Warmer Switch(es) for testing procedures. See pages 18 & 19.
	2. Decanter Warmers	Refer to Service - Warmers for testing procedures. See page 17.

TROUBLESHOOTING (cont.)

Problem	Probable Cause	Remedy
Spitting or unusual steaming from sprayhead.	1. Control Thermostat	Refer to Service - Control Thermostat for testing procedures. See page 16.
	2. Lime build-up	Inspect the tank assembly for excessive lime deposits. Delime as required.
CAUTION Tank and tank components should be delimed regularly depending on local water conditions. Excessive mineral build-up on stainless steel surfaces can initiate corrosive reactions resulting in serious leaks.		
Inconsistent beverage level in decanter.	1. Flow control	(A) Direction of flow arrow must be pointing away from the solenoid. (B) Remove the control and check for obstructions. Clear or replace.
	2. Improper water pressure	Check the operating water pressure to the brewer. It must be between 20 and 90 psi (138 and 620 kPa).
	3. Syphon system	Water should flow freely from the sprayhead for approximately twenty seconds after the brew solenoid has shut-off and then stop flowing abruptly. The brewer must be level from front-to-back to syphon properly.
Consistently high or low beverage level in decanter.	1. Brew Timer adjustment	Adjust the brew timer as required to achieve the recommended 64 oz for each brew cycle.
Dripping from sprayhead.	1. Syphon system	Water should flow freely from the sprayhead for approximately twenty seconds after the brew solenoid has shut-off and then stop flowing abruptly. The brewer must be level from front-to-back to syphon properly.
	2. Solenoid Valve	Refer to Service - Solenoid Valve for testing procedures. See page 22.

TROUBLESHOOTING (cont.)

Problem	Probable Cause	Remedy
Beverage overflows decanter.	1. Beverage left in decanter	The brew cycle should be started only with an empty decanter under the funnel.
Weak beverage.	1. Type of paper filters	BUNN® paper filters should be used for proper extraction.
	2. Coffee	A sufficient quantity of fine or drip grind coffee should be used for proper extraction.
	3. Sprayhead	B.O.M. sprayhead #01082.0000 should be used to properly wet the bed of ground coffee in the funnel.
	4. Funnel loading	The BUNN® paper filter should be centered in the funnel and the bed of coffee leveled by gentle shaking.
	5. Water temperature	Place a funnel over an empty decanter on the warmer beneath the sprayhead. Place the On/Off brew station warmer switch in the upper position, press the start switch, and check the water temperature immediately below the sprayhead with an accurate thermometer. The reading should not be less than 195° F. Adjust the control thermostat slightly clockwise to increase the water temperature.
Brewer is making unusual noises.	1. Solenoid Valve	The nut on top of the solenoid valve must be tight or it will vibrate during operation.
	2. Plumbing lines	Plumbing lines should not rest on the counter top.
	3. Water supply	<p>(A) The brewer must be connected to a cold water line.</p> <p>(B) Water pressure to the brewer must not be higher than 90 psi (620 kPa). Install a regulator if necessary to lower the working pressure to approximately 50 psi (345 kPa).</p>

SERVICE

This section provides procedures for testing and replacing various major components used in this brewer should service become necessary. Refer to Troubleshooting for assistance in determining the cause of any problem.

Component Access

WARNING - Disconnect the brewer from the power source before the removal of any panel or the replacement of any component.

The brew timer, and control thermostat are located behind the front panel, FIG. 1 located beneath the brew funnel, attached with four #8-32 slotted-head screws.

The base warmer(s), switch(es), indicator lamp, start switch, tank “keep warm” heater, terminal block, and solenoid valve, are located in the base. Access is gained by removing the rear panel, FIG. 1 attached with two #8-32 slotted-head screws

The limit thermostat, and tank heater are located on the tank lid. Access is gained by removing the top lid, FIG. 1 attached with three #8-32 slotted head screws. On the model OT, the upper warmer, switch, and associated indicator lamp are located on this removable top lid.

WARNING - Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel. The brewer should be disconnected from the power source when servicing, except when electrical tests are required and the test procedure specifically states to connect the brewer to the power source.

Contents

Brew Timer (Early Models).....	13
Digital Timer (Late Models).....	14
Control Thermostat.....	16
Warmer(s)	
OT: Brew Station & Upper	17
RT: Left Rear, Left Front, Brew Station, Right Rear & Right Front	17
Warmer Switch(es)	
OT: On/Off Brew Station & Upper	18
RT: On/Off Brew Station.....	18
RT: Left Rear, Left Front, Right Rear & Right Front Rotary	19
Indicator Lamp(s)	20
Limit Thermostat.....	21
Solenoid Valve	22
Start Switch	23
Tank Heater	24
Thermal Cut-off	25
Master ON/OFF Switch.....	26
Wiring Schematics	27

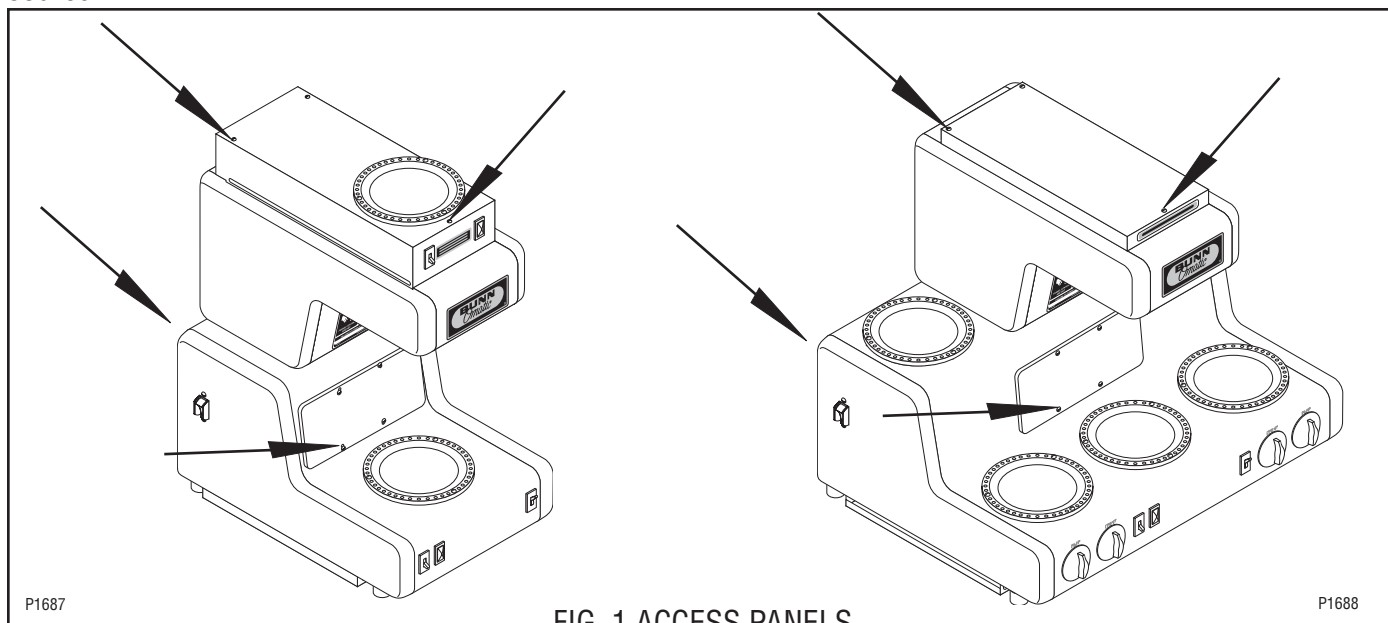
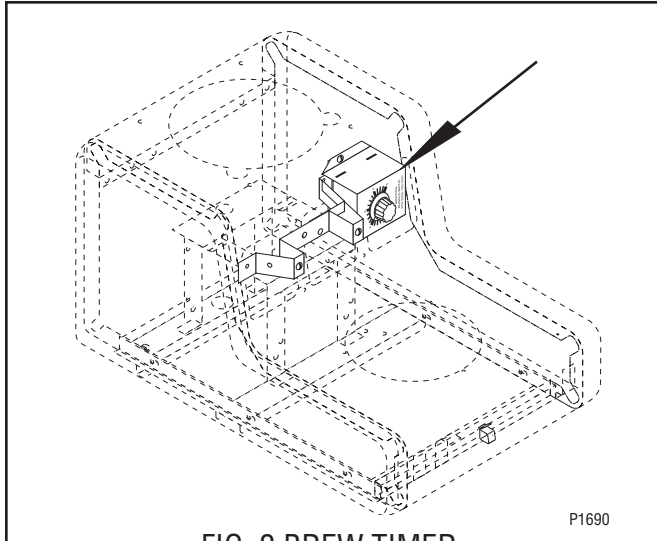


FIG. 1 ACCESS PANELS

SERVICE (cont.)**Brew Timer (Early Models)****FIG. 2 BREW TIMER****Location:**

The brew timer is located behind the front panel to the right of the tank, FIG. 2.

Test Procedure:

1. Disconnect the brewer from the power source and separate the polarized, three-pin connectors between the timer and brewer wiring harness and rotate the brew timer dial fully counterclockwise.
2. Check the voltage across sockets 2 & 3 (white or red and black wires) of the female connector with a voltmeter when the On/Off brew station warmer switch is in the upper position. Connect the brewer to the power source. The indication must: a) 120 volts ac for two wire 120 volt models.
b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across sockets 1 & 2 (blue and white or red wires) of the female connector with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and held. Connect the brewer to the power source. The indication must be as described in step 2, until the start switch is released.
5. Disconnect the brewer from the power source.

If voltage is present as described, reconnect the polarized, three-pin connectors, and proceed to #6.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

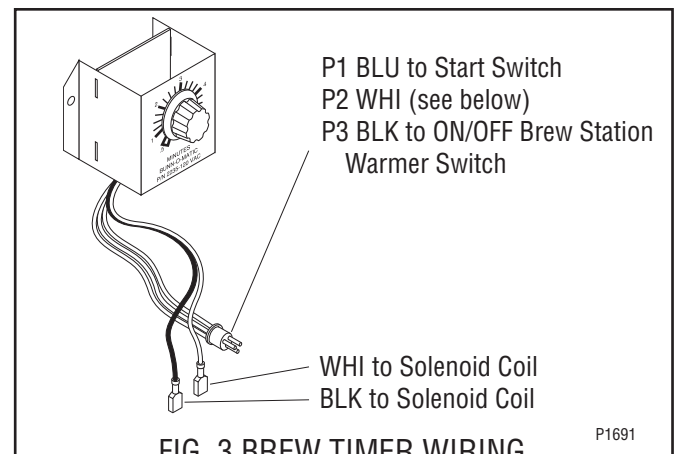
6. Disconnect the in-line connectors on the black and white wires from the timer to the solenoid.
7. Check the voltage across the black and white wires with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and released. Connect the brewer to the power source. The indication must be as described in step 2, for approximately 20 seconds and then return to its previous indication.
8. Disconnect the brewer from the power source.

If voltage is present as described, the brew timer is operating properly. Reset the timer dial as required, to obtain the desired brew volume.

If voltage is not present as described, replace the brew timer.

Removal and Replacement:

1. Separate all connectors between the brewer wiring harness and the timer.
2. Remove the two 8-32 slotted-head screws holding the timer to the bracket.
3. Install the new timer to the bracket.
4. Refer to FIG.3 when reconnecting the wires.
5. Readjust the timer dial as required.

**FIG. 3 BREW TIMER WIRING****MODEL**

OT	WHI	to Indicator Lamp
RT	WHI	to Brew Station Warmer

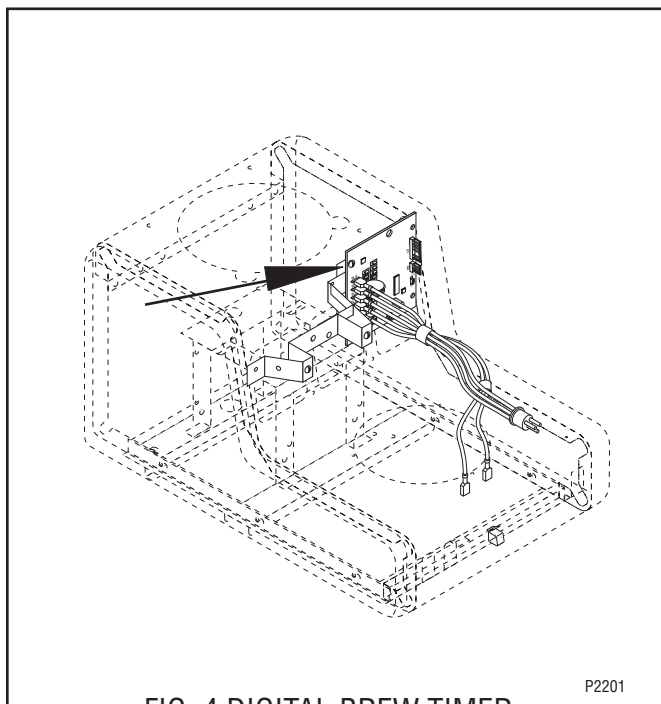
SERVICE (cont.)**DIGITAL BREW TIMER (Late Models)**

FIG. 4 DIGITAL BREW TIMER

Location:

The timers are located inside the front of the trunk on the upper right side of the component brackets.

Test Procedure.

NOTE: Do not remove or install wires while timer board is installed. Pressure applied to one side may cause damage to the board.

1. Disconnect the brewer from the power source and remove the front access panel.
2. Remove the one #8-32 screw securing circuit board to the mounting bracket.
3. Remove circuit board and spacers (as required).
4. With a voltmeter, check the voltage across terminals TL1 and TL2 when the "ON/OFF" switch is in the "ON" position. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
5. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #6.
If voltage is not present as described, refer to the *Wiring Diagrams* and check the brewer wiring harness.

6. Disconnect the white/blue wire from terminal TL3 and the blue/black wire from terminal TL5. With a voltmeter, check for continuity across the two wires when the "ON/OFF" switch is in the "ON" position (upper) and the START switch is pressed. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.

If continuity is present as described, reconnect the wires and proceed to #7.

If continuity is not present as described, refer to the *Wiring Diagrams* and check the brewer wiring harness.

7. With a voltmeter, check the voltage across terminals TL1 and TL4 when the "ON/OFF" switch is in the "ON" position. Connect the brewer to the power source. The indication must be 0 volts.

If voltage is as described, proceed to #8.

If voltage is not as described, disconnect the brewer from the power source and replace the timer.

8. With a voltmeter, check the voltage across terminals TL1 and TL4 when the "ON/OFF" switch is in the "ON" position. Connect the brewer to the power source and press the "START" switch. The indication must be as follows:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.

If voltage is present as described, the brew timer is operating properly. Reset the timer as required, to obtain the desired brew volume.

If voltage is not present as described, disconnect the brewer from the power source and replace the timer.

Removal and Replacement:

1. Remove the one #8-32 screw securing circuit board to the mounting bracket.
2. Remove circuit board and spacers (as required).

SERVICE (cont.)**DIGITAL BREW TIMER (Late Models)(cont.)**

3. Remove all wires from the timer.
4. Attach all wires to the replacement timer board prior to installation to the component mounting bracket. Refer to FIG. 5 when reconnecting the wires.
5. Install new circuit board with spacers (as required) to the component mounting bracket.
6. Adjust the timer as described below.

Timer Setting:

NOTE: Prior to setting or modifying volumes, check that the brewer is connected to water supply, the tank is properly filled, and a funnel and server are in place.

NOTE: All volume settings must be done with the sprayhead installed.

1. **Modifying brew volumes.** To modify a brew volume, first check that the SET/LOCK switch is in the “SET” position on the circuit board.

To increase a brew volume, place the ON/OFF switch in the “ON” position, press and hold the START switch until three clicks are heard. Release the switch and press it again one or more times. (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory.) Each time the switch is pressed, two seconds are added to the brew time period. Allow the brew cycle to finish in order to verify that the desired volume has been achieved.

To decrease a brew volume, place the ON/OFF switch in the “ON” position, press and release the START switch once for every two-second interval to be removed from the total brew time period; then immediately press and hold down the START switch until three clicks are heard. Release the switch. (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory). Allow the brew cycle to finish in order to verify that the desired volume has been achieved.

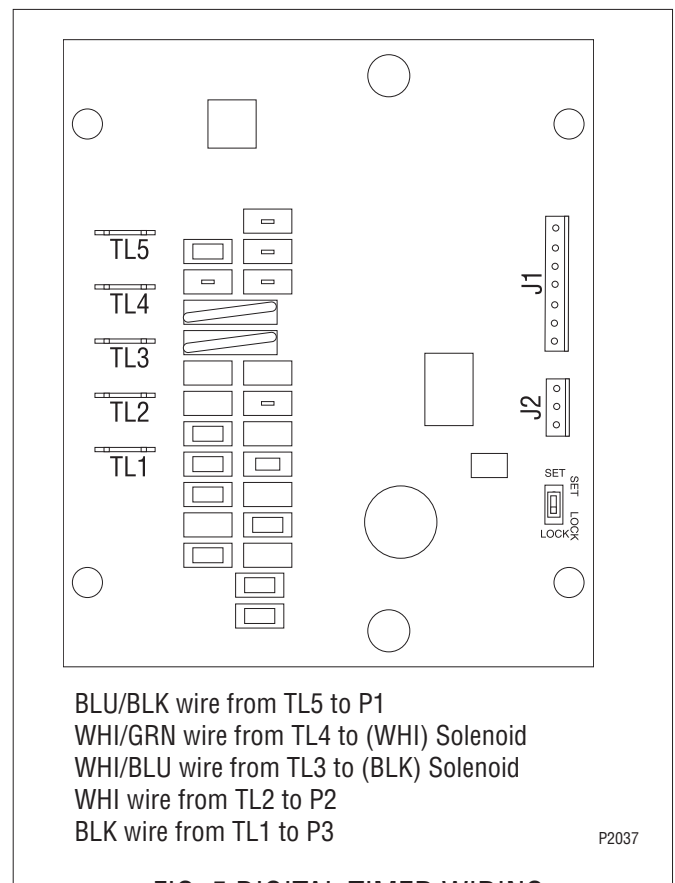
2. **Setting brew volumes.** To set a brew volume, first check that the SET/LOCK switch is in the “SET” position on the circuit board. Place the ON/OFF switch in the “ON” position, press and hold the START switch until three distinct clicks are heard and then release the switch. (Failure to release the switch within two seconds after the third click causes the volume setting to be aborted and previous volume setting will remain in memory.)

View the level of the liquid being dispensed. When the desired level is reached, turn the ON/OFF switch to “OFF”.

NOTE: Several ounces of water will continue to syphon from the tank after turning the switch “OFF”. The brewer remembers this volume and will continue to brew batches of this size until the volume setting procedure is repeated.

NOTE: When brewing coffee, volume will decrease due to absorption by the coffee grounds.

3. **Setting programming disable feature.** If it becomes necessary to prevent anyone from changing brew time once programmed, you can set the SET/LOCK switch to the “LOCK” position. This will prevent any further programming until switch is once again put into the “SET” position.

**FIG. 5 DIGITAL TIMER WIRING**

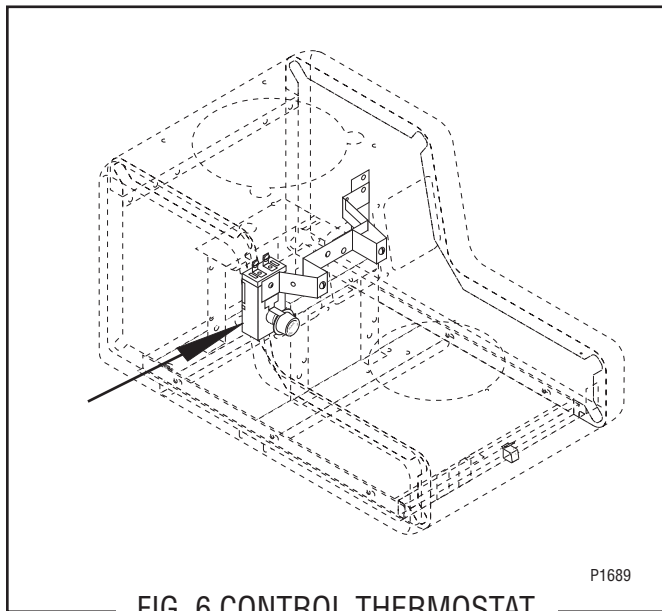
SERVICE (cont.)**Control Thermostat**

FIG. 6 CONTROL THERMOSTAT

Location:

The control thermostat is located behind the front panel, FIG. 6 to the left of the tank.

To test the control thermostat, access will also be needed to the tank heater located in the top of the brewer.

Test Procedure:

1. Disconnect the brewer from the power source.
2. Check the voltage across the blue wire on the control thermostat and the white or red wire on the tank heater with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across the black wire terminal of the control thermostat and the white or red wire on the tank heater with a voltmeter when the control thermostat is turned "ON" (fully clockwise). Connect the brewer to the power source. The indication must be as described in step 2. Voltage must not be indicated across

these terminals when the thermostat is turned "OFF" (fully counterclockwise).

5. Disconnect the brewer from the power source.

If voltage is present as described, the control thermostat is operating properly.

If voltage is not present as described, replace the control thermostat.

Removal and Replacement:

1. Remove both wires from the control thermostat terminals.
2. Remove the top lid from the brewer to gain access to the thermostat bulb.
3. Remove the thermostat bulb by firmly pulling-up on the capillary tube at the tank lid. This will disengage the grommet from the tank lid.
4. Remove the two #8-32 screws holding the control thermostat to the bracket.
5. Fasten the new control thermostat to the brewer housing.
6. Route the capillary tube up through the brewer trunk.

NOTE - Make sure that the capillary tube is away from any electrical termination and is not kinked.

7. Slide the grommet to the red mark on the capillary tube.
8. Insert the bulb through the hole in the tank lid and press the grommet firmly and evenly so that the groove in the grommet fits into the tank lid.
9. Carefully bend the capillary tube so that the tube and bulb inside the tank are in a vertical position.
10. Refer to FIG. 7 when reconnecting the wires.
11. Readjust the control thermostat dial as required.

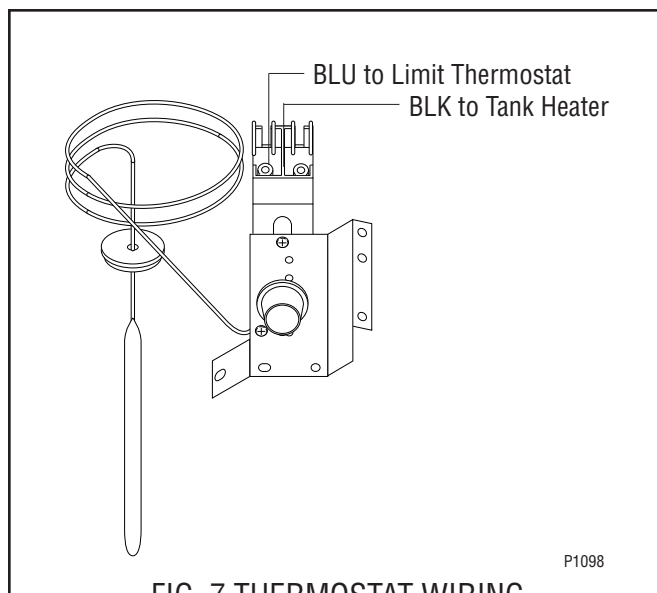


FIG. 7 THERMOSTAT WIRING

SERVICE (cont.)**Warmer(s)**

OT: Brew Station & Upper

RT: Left Rear, Left Front, Brew Station, Right Rear & Right Front

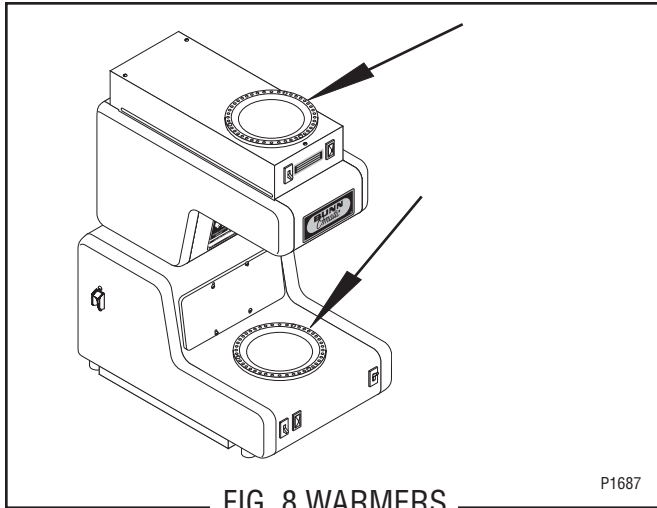


FIG. 8 WARMERS

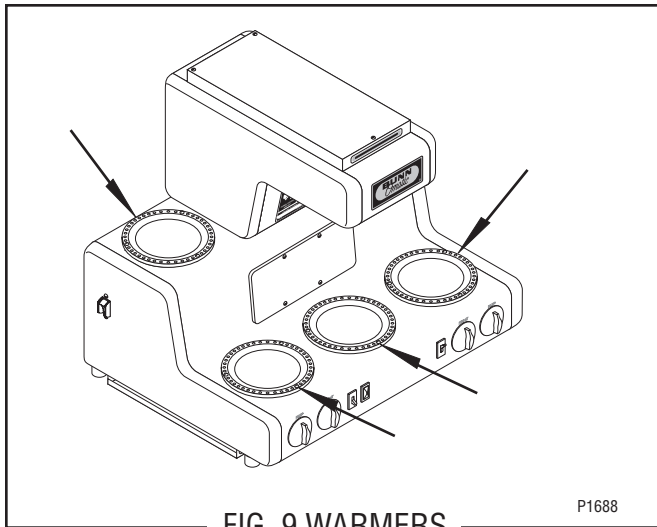


FIG. 9 WARMERS

Location:

OT: One of the warmers is beneath the brew funnel and the other is on the top lid, FIG. 8.

RT: These warmers include the one beneath the brew funnel, the ones on the right and left of the brew station, and the one above and to the left and right of the brew station as viewed from the front, FIG. 9.

Test Procedure:

1. Once the switch has been tested and switch failure has been eliminated, proceed as follows.
2. Disconnect the brewer from the power source and remove the #4-40 screws attaching the warmer being tested.
3. Lift the warmer assembly from the brewer and invert the warmer making the wire terminals accessible for testing.
4. Check for continuity from the switch to the black wire at the warmer element.

If continuity is present as described, proceed to #5.

5. Check for continuity from the wire terminal of the white or red wire to the splice or indicator lamp using the chart below.

If continuity is present as described, proceed to #6. If continuity is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

6. Check for continuity across the two terminals on the warmer.

If continuity is present as described, the warmer is operating properly. If continuity is not present as described, replace the warmer.

Removal and Replacement:

1. Remove the #4-40 slotted-head screws holding the warmer to the brewer
2. Lift the warmer assembly from the brewer.
3. Disconnect both wires from the warmer.
4. Refer to FIG. 10 when reconnecting the wires.
5. Place the new warmer into the brewer and securely attach it using the #4-40 screws.

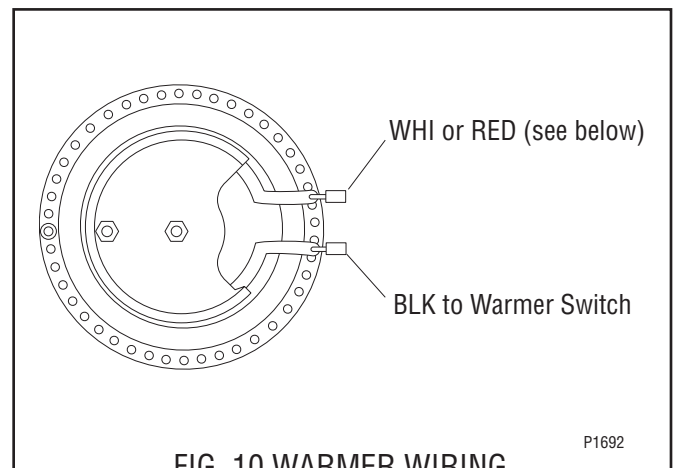


FIG. 10 WARMER WIRING

MODEL

OT Upper	WHI OR RED	to Indicator Lamp
OT Brew Station	WHI OR RED	to Indicator Lamp to Terminal Block
RT Left Rear	WHI OR RED	to Terminal Block to Brew Station Warmer
RT Left Front	WHI OR RED	to Indicator Lamp to Terminal Block
RT Brew Station	WHI OR RED	to Timer P2 to Left Rear Warmer
RT Right Front	WHI OR RED	to Right Rear Warmer to Indicator Lamp
RT Right Rear	WHI OR RED	to Right Front Warmer

SERVICE (cont.)**Warmer Switch(es)**

OT: On/Off Brew Station & Upper

RT: On/Off Brew Station

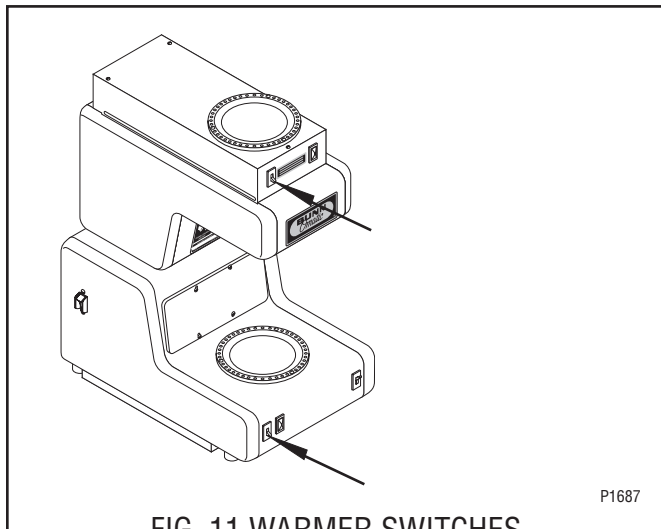


FIG. 11 WARMER SWITCHES

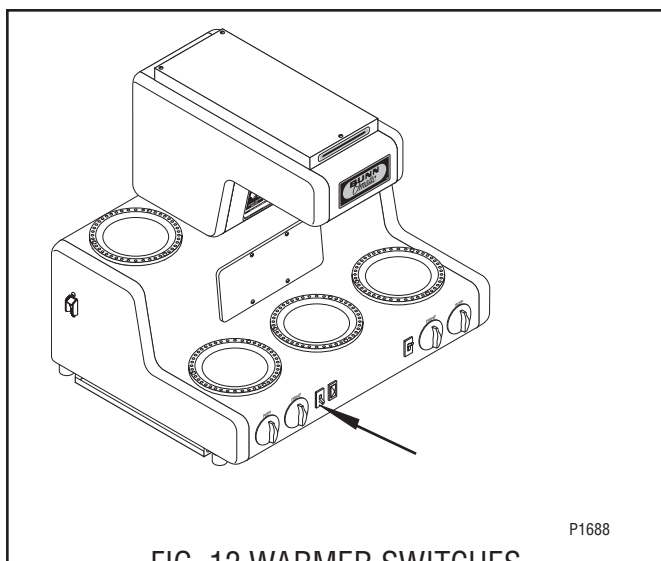


FIG. 12 WARMER SWITCHES

Location:

These switches are located beneath and to the left of their associated warmers as viewed from the front, FIG.s 11 and 12.

Test Procedure:

1. Locate the switch terminal with black wires that do not go to the nearby indicator lamp.
2. Check the voltage across this terminal and the terminal on the indicator lamp with white or red wires with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

4. Check the voltage across the other switch terminal and the terminal on the indicator lamp with white or red wires with a voltmeter when the switch is in the upper position. Connect the brewer to the power source. The indication must be as described in step 2. Voltage must not be present across these terminals in the lower position.
5. Disconnect the brewer from the power source.

If voltage is present as described the switch is operating properly.
If voltage is not present as described, replace the switch.

Removal and Replacement:

1. Compress the clips inside the housing and gently push the switch through the opening.
2. Remove the wires from the switch terminals.
3. Refer to FIG. 13 when reconnecting the wires.
4. Push the new switch firmly into the opening.

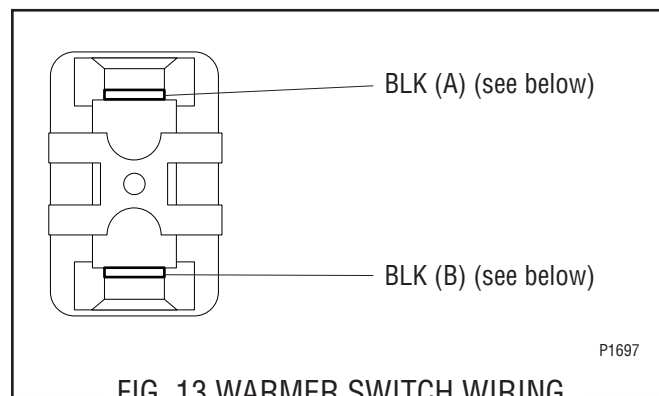


FIG. 13 WARMER SWITCH WIRING

MODEL

OT Upper

BLK A to Warmer
to Indicator Lamp
BLK B to Harness P3

OT On/Off Brew Station

BLK A to Indicator Lamp
to Brew Station Warmer
to Timer P3
BLK B to Terminal Block

RT On/Off Brew Station

BLK A to Indicator Lamp
to Timer P3
to Brew Station Warmer
BLK B to Left Front Warmer Switch
to Right Front Warmer Switch

SERVICE (cont.)**Warmer Switch(es)**

RT: Left Rear, Left Front, Right Rear & Right Front

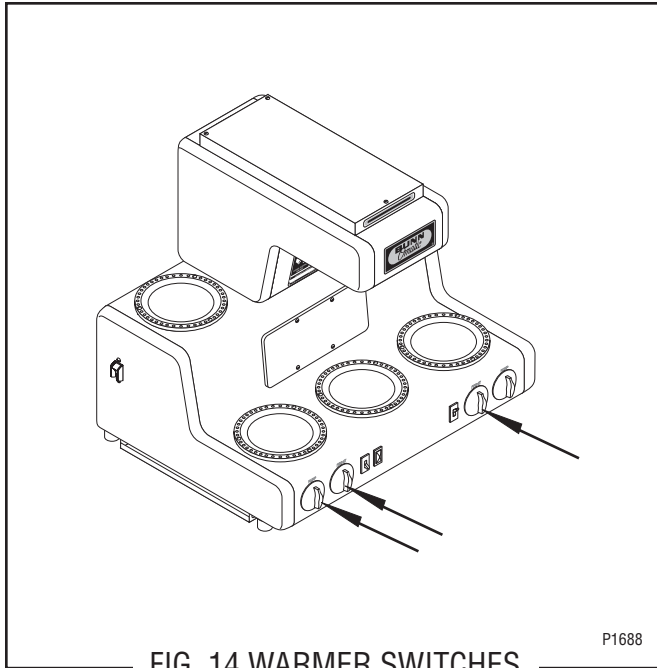


FIG. 14 WARMER SWITCHES

P1688

Location:

These warmer switches are the two at the left and the left most one on the right of the base as viewed from the front, FIG. 14. Their knobs are marked Off/On/Off/On.

To test these switches, access will also be needed to the terminal block located in the rear of the brewer.

Test Procedure:

1. Check the voltage across terminal L1 and the white or red wire on the terminal block with a voltmeter. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check the voltage across terminal 1 and the white or red wire on the terminal block with a voltmeter when the switch is in the "ON" position. Connect the brewer to the power source. The indication must be as described in step 1. Voltage must not be present across these terminals in the "OFF" positions.
4. Disconnect the brewer from the power source.

If voltage is present as described, the switch is operating properly.

If voltage is not present as described, replace the switch.

Removal and Replacement:

1. Remove the knob from the switch.
2. Loosen the 5/8" nut on the switch shaft and push the switch through the opening.
3. Remove the wires from the switch terminals.
4. Refer to FIG. 15 when reconnecting the wires.
5. Securely mount the new switch onto the housing and reinstall the knob.

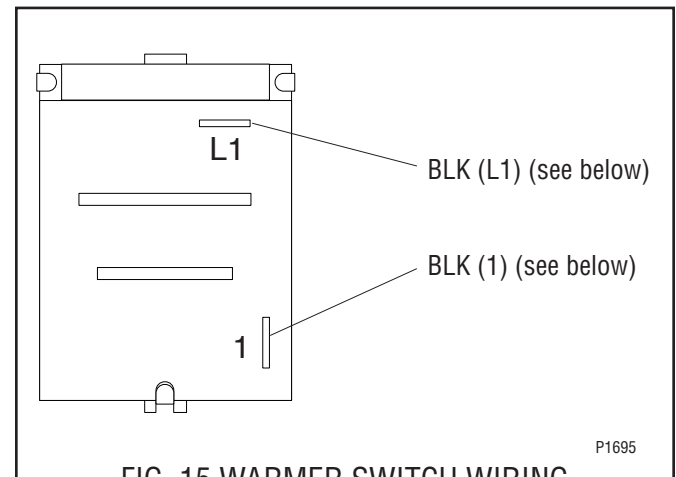


FIG. 15 WARMER SWITCH WIRING

P1695

MODEL

RT Left Rear	BLK L1	to Warmer
	BLK 1	to Left Front Warmer Switch
RT Left Front	BLK L1	to Warmer
	BLK 1	to Left Rear Warmer Switch to Brew Station Warmer Switch
RT Right Front	BLK L1	to Warmer
	BLK 1	to Terminal Block to Brew Station Warmer Switch to Right Rear Warmer Switch
RT Right Rear	BLK L1	to Warmer
	BLK 1	to Right Front Warmer Switch

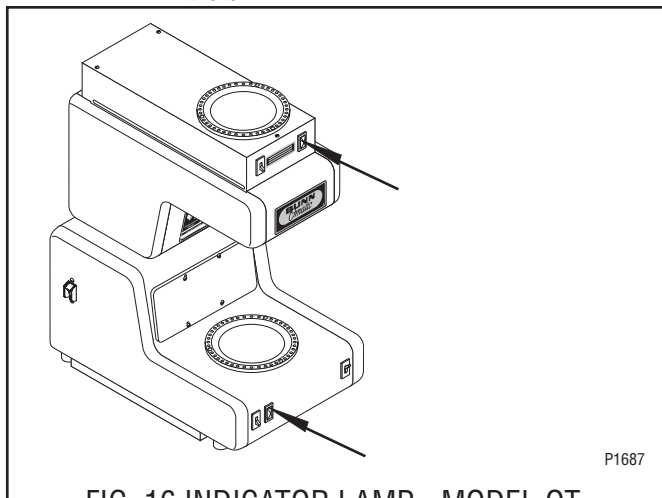
SERVICE (cont.)**Indicator Lamp(s)**

FIG. 16 INDICATOR LAMP - MODEL OT

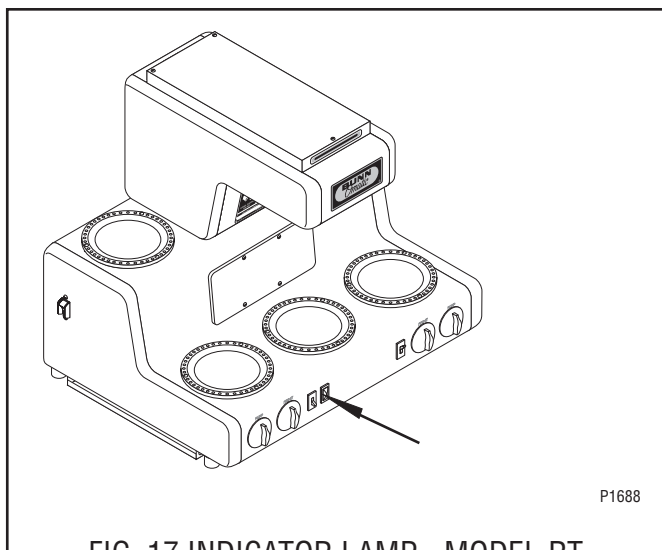


FIG. 17 INDICATOR LAMP - MODEL RT

Location:

The indicator lamps are located beneath their associated warmers, FIG.s 16 and 17.

Test Procedure:

1. Check continuity of the black wire from the switch to the indicator lamp.
2. Check continuity of the white or red wire from the indicator lamp to the terminal block.

If continuity is present, proceed to #3.

If continuity is not present, refer to Wiring Diagrams and check brewer wiring harness.

3. Check for voltage across the indicator lamp terminals. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.

4. Disconnect the brewer from the power source.

If voltage is present, the indicator lamp is operating properly.

If voltage is not present, replace the indicator lamp.

Removal and Replacement:

1. Compress the clips inside the housing and gently push the indicator lamp through the opening.
2. Remove the wires from the indicator lamp terminals.
3. Refer to FIG. 18 when reconnecting the wires.
4. Push the new indicator lamp firmly into the opening.

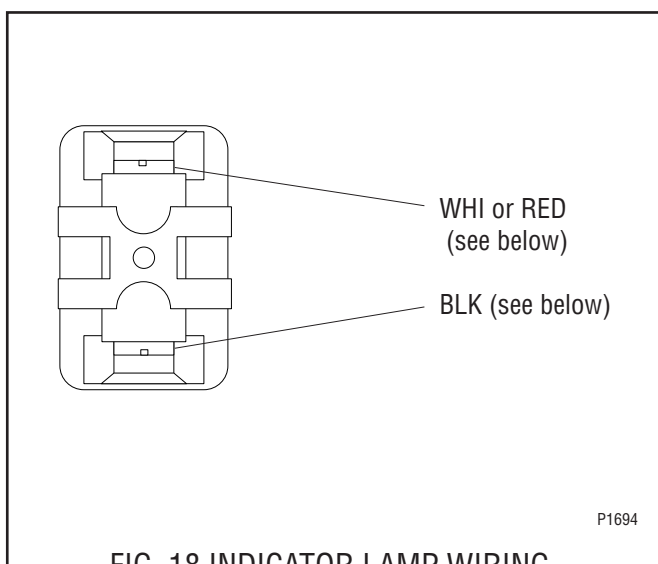
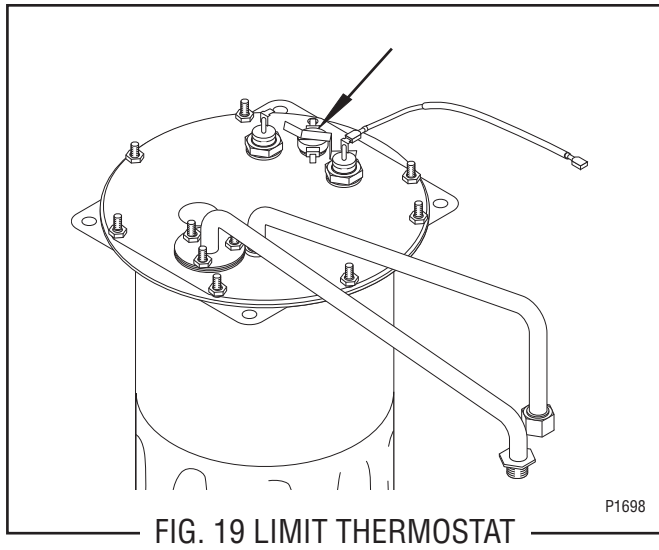


FIG. 18 INDICATOR LAMP WIRING

MODEL		
OT Upper	BLK	to Warmer Switch
	WHI or RED	to Warmer
		to Harness P2
OT Lower	BLK	to Start Switch
		to On/Off Brew Station Warmer
	WHI or RED	Switch
		to Timer P2
		to Brew Station Warmer
RT	BLK	to Start Switch
		to On/Off Brew Station Warmer
		Switch
	WHI or RED	to Right Front Warmer
		to Left Front Warmer

SERVICE (cont.)**Limit Thermostat****Location:**

The limit thermostat is located on the tank lid between the tank heater terminals, FIG. 19.

Test Procedure:

1. Disconnect the brewer from the power source.
2. Check voltage across the black wire from the limit thermostat and the white or red wire on the tank heater terminal. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
3. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #4.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

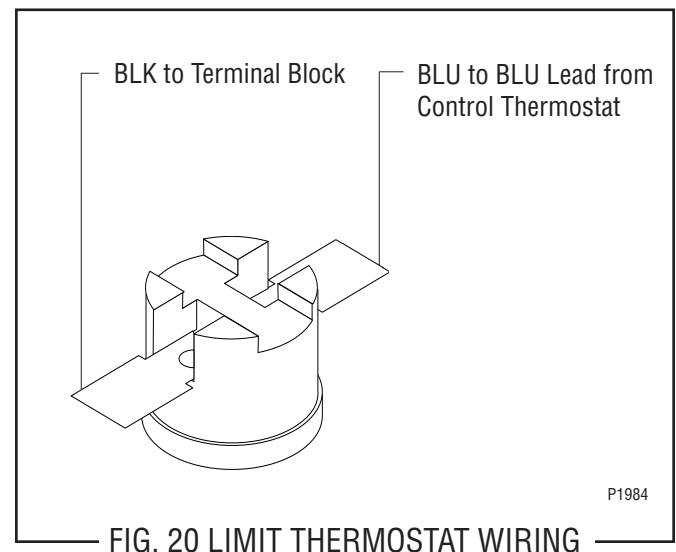
4. Check for continuity across the limit thermostat terminals.

If continuity is present as described, the limit thermostat is operating properly.

If continuity is not present as described, replace the limit thermostat.

Removal and Replacement:

1. Remove both wires from the limit thermostat terminals.
2. Carefully slide the limit thermostat out from under the retaining clip.
3. Carefully slide the new limit thermostat into the retaining clip.
4. Refer to FIG. 20 when reconnecting the wires.



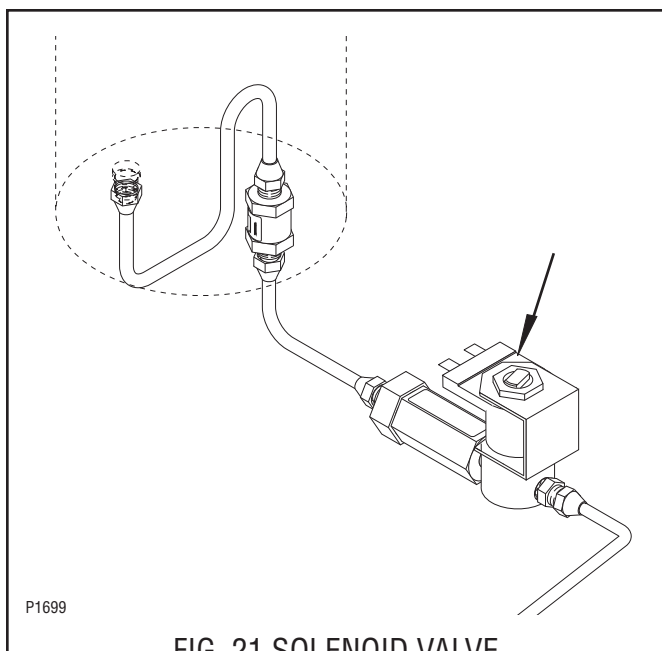
SERVICE (cont.)**Solenoid Valve**

FIG. 21 SOLENOID VALVE

Location:

The solenoid valve is located below and to the left of the tank as viewed from the rear, FIG. 21.

Test Procedure:

1. Check the voltage across the white and black wires with a voltmeter when the On/Off brew station warmer switch is in the upper position and the start switch is pressed to the lower position and released. Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models and three wire 120/240 volt models,
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models,
 - c) 100 volts ac for two wire 100 volt models,
 for the approximate setting on the brew timer dial and then return to zero.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.

If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

3. Check for continuity across the solenoid valve coil terminals.

If continuity is present as described, reconnect the white and black wires and proceed to #4.

If continuity is not present as described, replace the solenoid valve.

4. Check the solenoid valve for coil action. Connect the brewer to the power source, place the On/Off brew station warmer switch in the upper position, press and release the start switch. Listen carefully in the vicinity of the solenoid valve for a "clicking" sound as the coil magnet attracts and after the approximate setting on the brew timer dial, repels the plunger.
5. Disconnect the brewer from the power source.

If the sound is heard as described and water will not pass through the solenoid valve, there may be a blockage in the water line before or after the solenoid valve or, the solenoid valve may require inspection for wear, and removal of waterborne particles.

If the sound is not heard as described, replace the solenoid valve.

Removal and Replacement:

1. Remove all wires from the solenoid valve coil.
2. Turn off the water supply to the brewer.
3. Remove the bottom pan attached with one or more 8-32 slotted-head screw(s) beneath the front of the brewer.
4. Raise the brewer approximately six inches from the counter top and support the feet on something sturdy.
5. Disconnect the water lines to and from the solenoid valve.
6. Remove the two 10-32 screws holding the solenoid valve to the bracket.
7. Lift-out the solenoid valve.
8. Securely install the new solenoid valve to the bracket. Check the direction of flow arrow on the valve. It must be pointing toward the flow control.
9. Securely fasten the water lines to and from the solenoid valve.
10. Refer to FIG. 22 when reconnecting the wires.

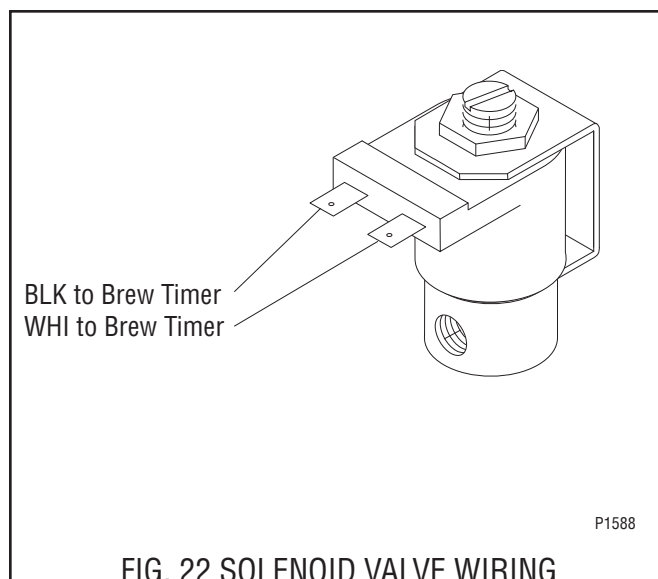


FIG. 22 SOLENOID VALVE WIRING

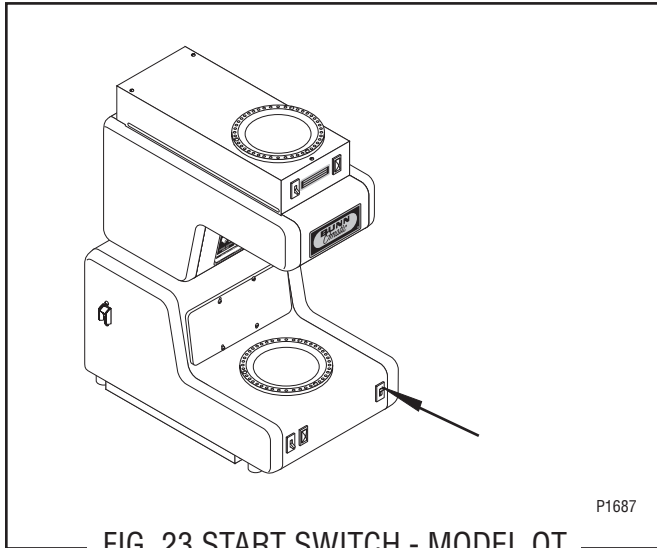
SERVICE (cont.)**Start Switch**

FIG. 23 START SWITCH - MODEL OT

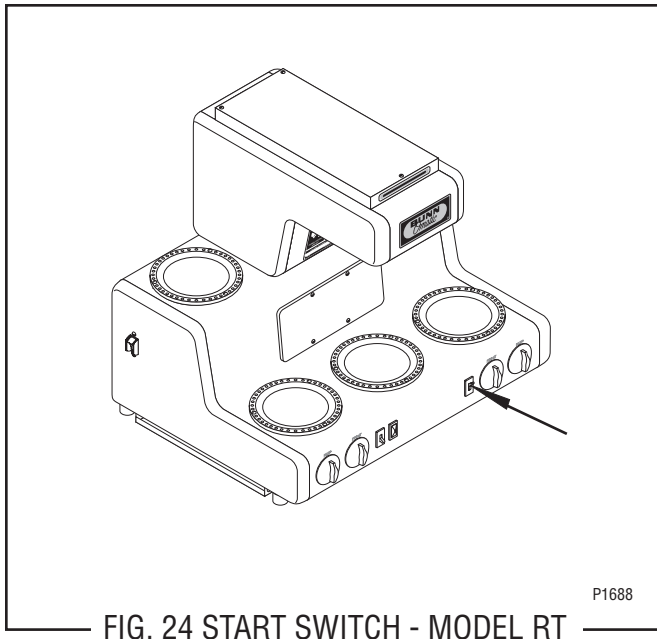


FIG. 24 START SWITCH - MODEL RT

If continuity is present as described, reconnect the wires, the switch is operating properly. If continuity is not present as described, replace the switch.

Removal and Replacement:

1. Remove all wires from the switch terminals.
2. Compress the clips inside the housing and gently push the switch through the opening.
3. Push the new switch into the opening and spread the clips to hold the switch captive in the housing.
4. Refer to FIG. 25 when reconnecting the wires.

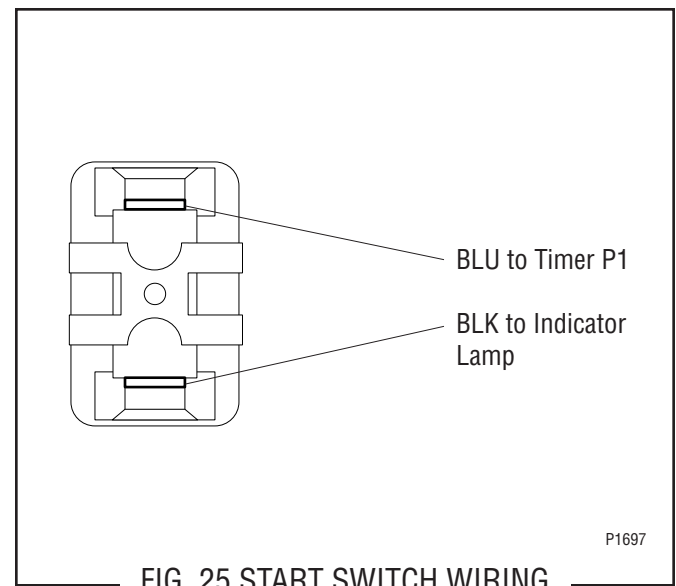


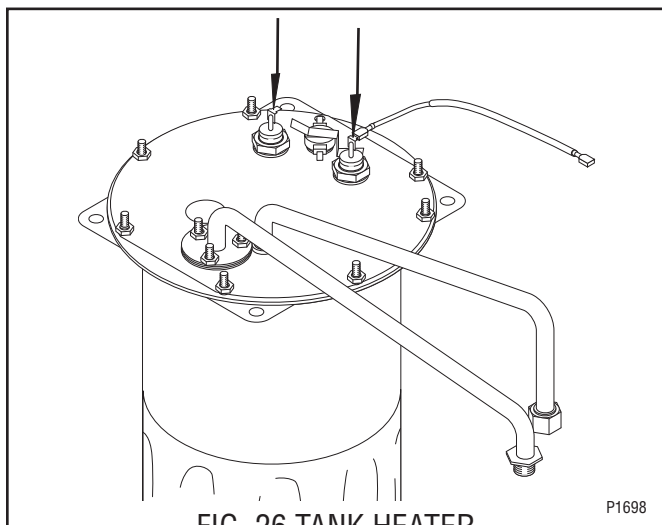
FIG. 25 START SWITCH WIRING

Location:

The start switch is located in the base, below and to the right of the brew station, FIG.s 23 & 24.

Test Procedure:

1. Disconnect the brewer from the power source and remove the wires from both terminals of the start switch.
2. Check for continuity across the two terminals on the switch when it is held in the lower position. Continuity must not be present across these terminals in the upper position.

SERVICE (cont.)**Tank Heater**Location:

The tank heater is located on the tank lid, FIG. 26.

Test Procedure:

1. Check the voltage across the black and white or red wires on the tank heater with a voltmeter when the control thermostat is turned "ON" (fully clockwise). Connect the brewer to the power source. The indication must be:
 - a) 120 volts ac for two wire 120 volt models.
 - b) 200 or 240 volts ac for two wire 200 volt or 240 volt models and three wire 120/240 volt models.
 - c) 100 volts ac for two wire 100 volt models.
2. Disconnect the brewer from the power source.

If voltage is present as described, proceed to #3.
If voltage is not present as described, refer to the Wiring Diagrams and check the brewer wiring harness.

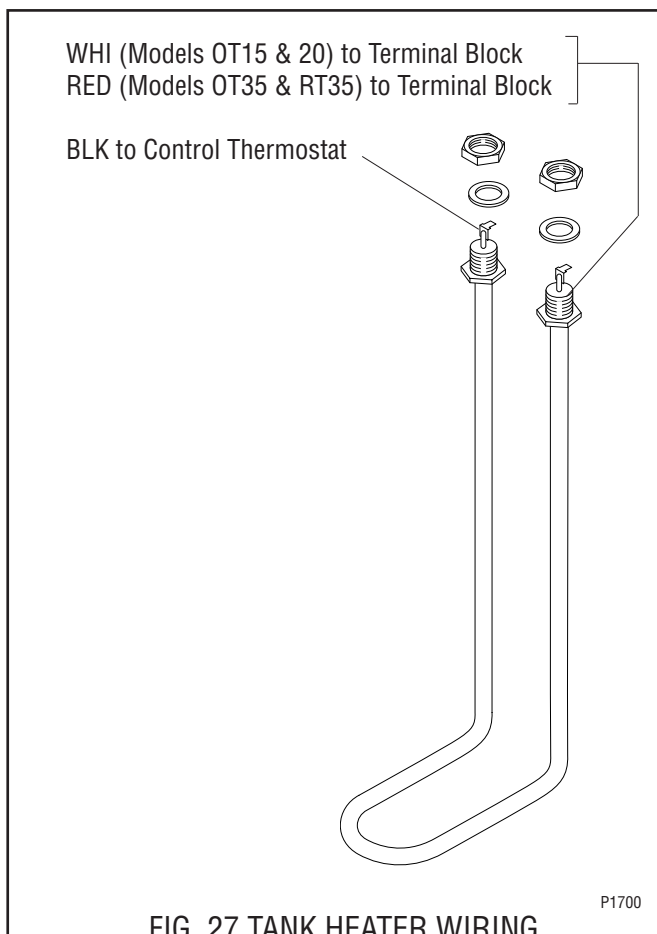
3. Check for continuity across the terminals of the tank heater.

If continuity is present as described, reconnect the wires, the tank heater is operating properly.
If continuity is not present as described, replace the tank heater.

NOTE - If the tank heater remains unable to heat, remove and inspect the heater for cracks in the sheath.

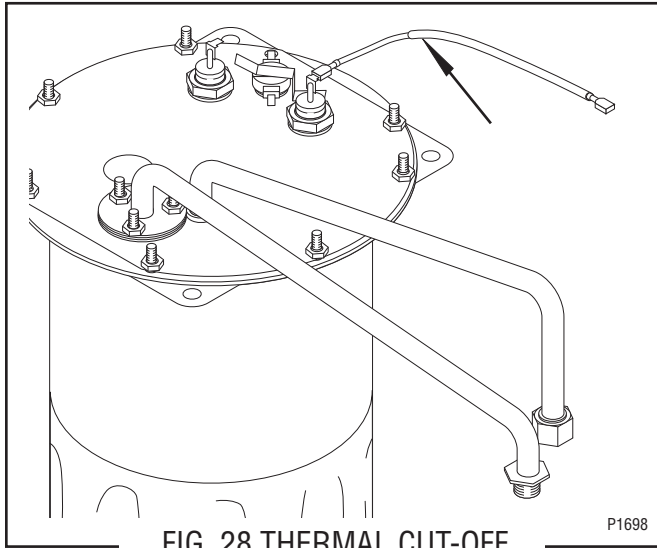
Removal and Replacement:

1. Remove the wires to the tank heater and limit thermostat terminals.
2. Gently pull the thermostat tube with grommet out of the tank lid.
3. Remove the sprayhead and sprayhead nut from the panel on the bottom of the hood.
4. Disconnect the air vent tube from the fitting above the sprayhead panel.
5. On units with faucet, disconnect the inlet and outlet tubes from the faucet coil fittings.
6. Loosen the eight 8-32 nuts on the tank lid and remove the tank lid.
7. Remove the two nuts from the tank heater fittings.
8. Remove the tank heater.
9. Install the new tank heater with new sealing washers on the underside of the tank lid.
10. Securely tighten the nuts to be certain of a watertight seal.
11. Reinstall the tank lid and tighten the eight nuts.
12. Reconnect the air vent tube to the fitting above the sprayhead panel.
13. Reconnect the inlet and outlet tubes to the faucet coil fittings on units with faucet.
14. Reinstall the sprayhead tube nut and sprayhead.
15. Reinstall the thermostat into the tank lid.
16. Refer to FIG. 27 when reconnecting the wires.



SERVICE (cont.)**Thermal Cut-off****Location:**

The thermal cut-off is located on the tank heater, FIG. 28.

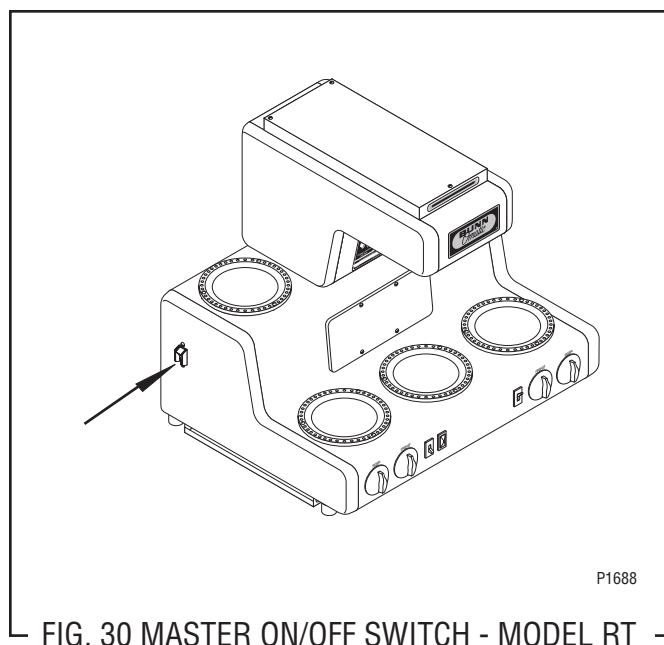
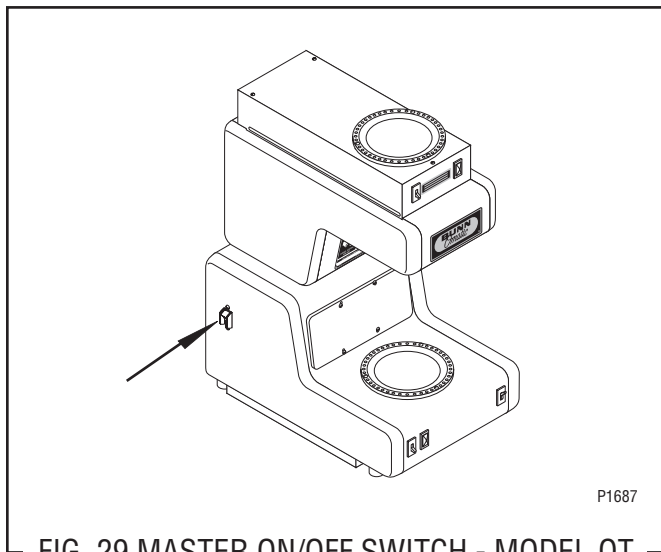
**Test Procedures:**

1. Disconnect the brewer from the power source.
2. Disconnect the thermal cut-off from the tank heater terminal and the wiring harness.
3. Check for continuity across the thermal cut-off terminals using an ohmmeter.

If continuity is present, the thermal cut-off is operating properly. If continuity is not present as described, replace the thermal cut-off.

Removal and Replacement:

1. Disconnect the thermal cut-off from the tank heater terminal and the wiring harness.
2. Remove thermal cut-off and discard.
3. Connect new thermal cut-off to the tank heater terminal and the wiring harness.

SERVICE (cont.)**Master ON/OFF Switch**Location:

The Master ON/OFF switch is located in the base, at the left rear, FIG.s 29 & 30.

Test Procedure:

1. Disconnect the brewer from the power source and remove the wires from all terminals of the Master ON/OFF switch.

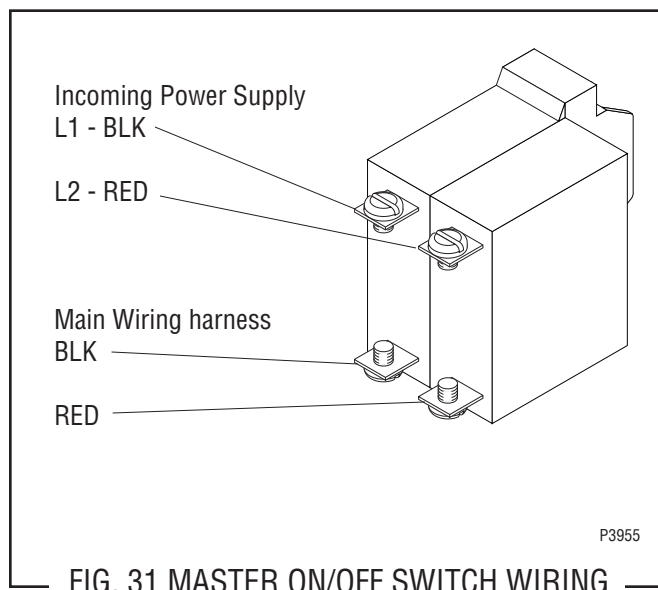
2. Check for continuity across the two terminals on the switch at L1 BLK and BLK to Main Harness when it is held in the lower position, Fig. 25. Check for continuity across the two terminals on the switch at L2 RED and RED to Main Harness when it is held in the lower position. Continuity must not be present across these terminals in the upper position.

If continuity is present as described, reconnect the wires, the switch is operating properly.

If continuity is not present as described, replace the switch.

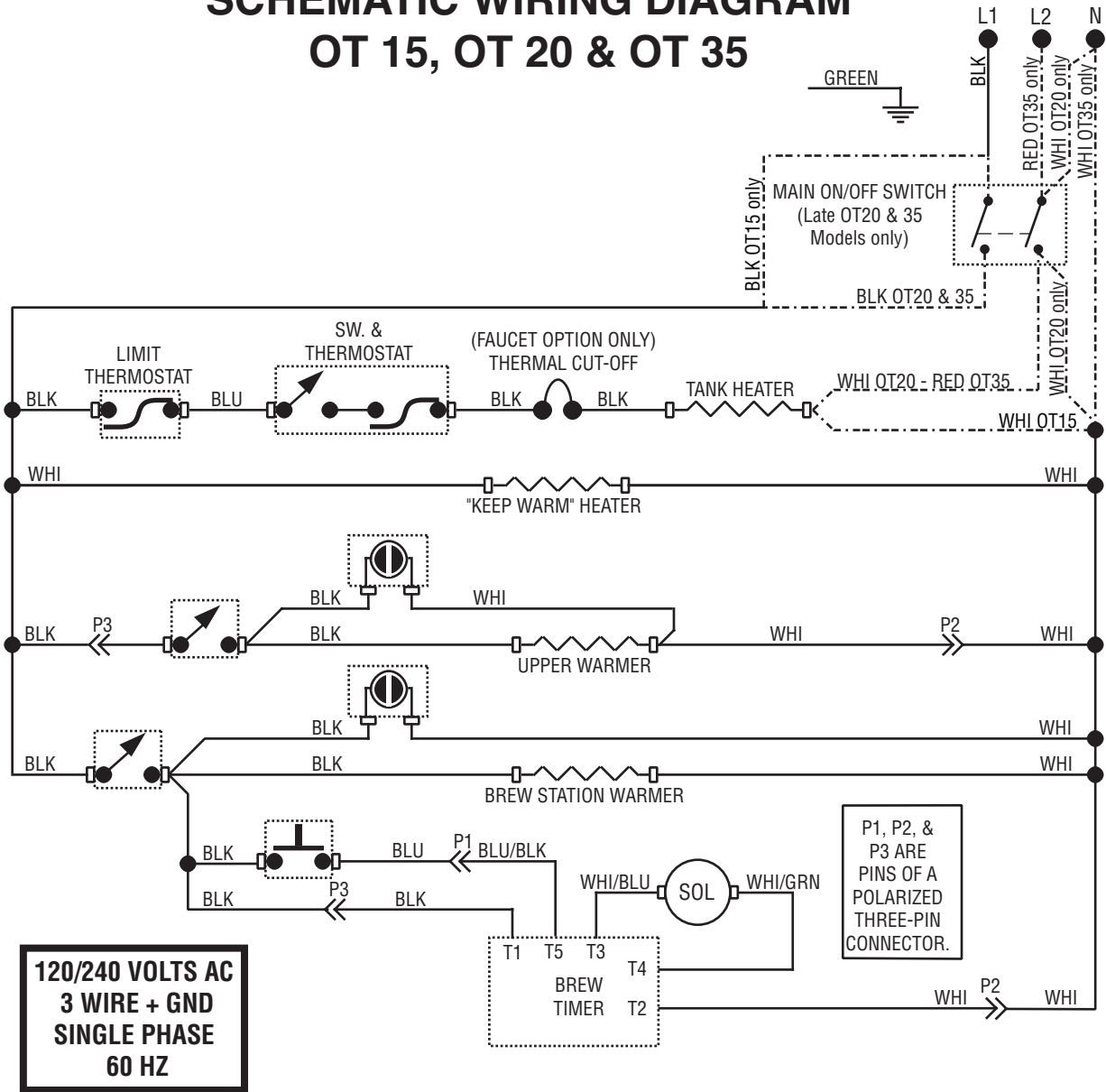
Removal and Replacement:

1. Remove all wires from the switch terminals.
2. Remove the two screws from the outside of the base and gently push the switch through the opening.
3. Locate the new switch into the opening and secure with screws removed in step 2.
4. Refer to FIG. 31 when reconnecting the wires.

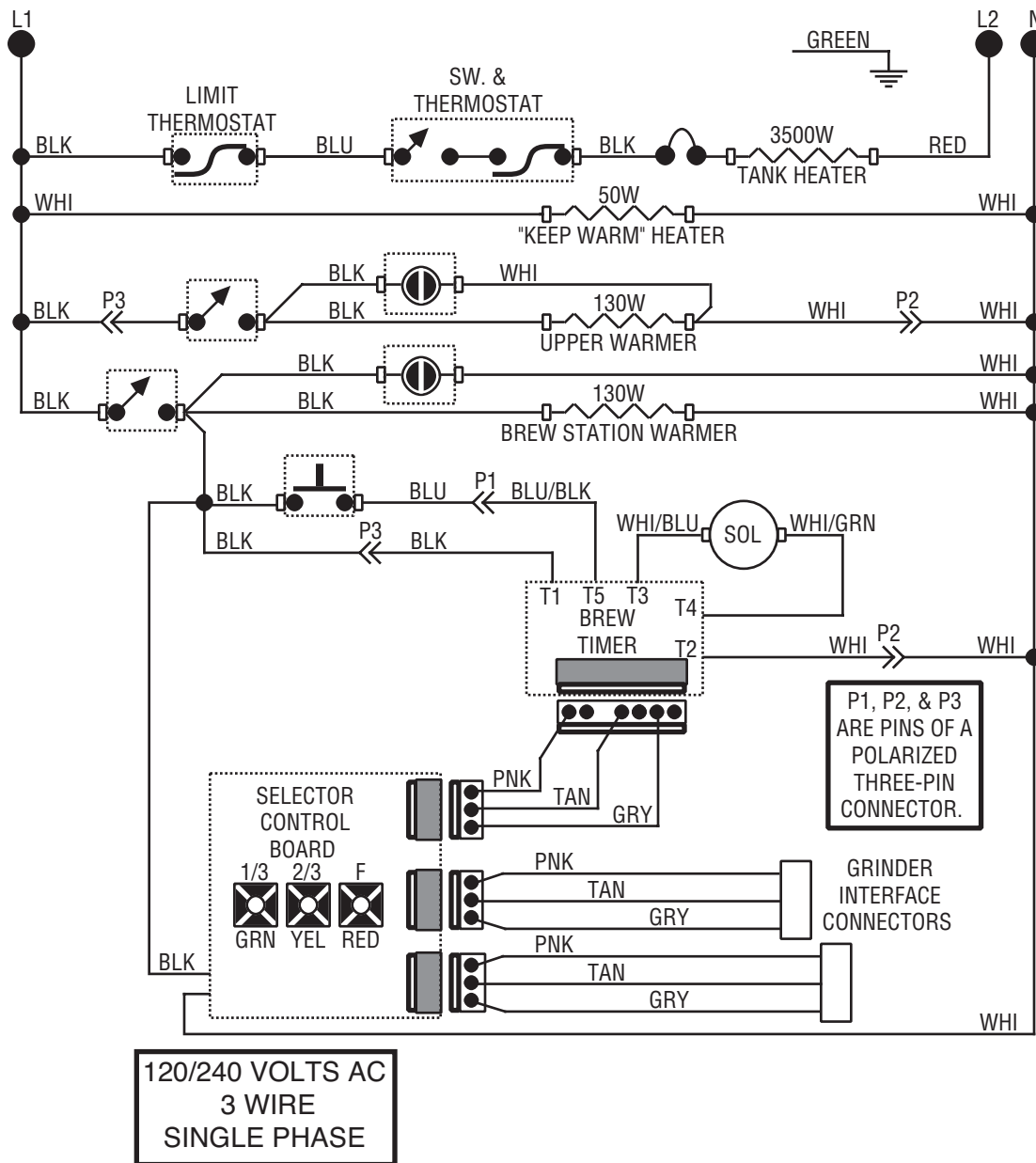


SCHEMATIC WIRING DIAGRAM

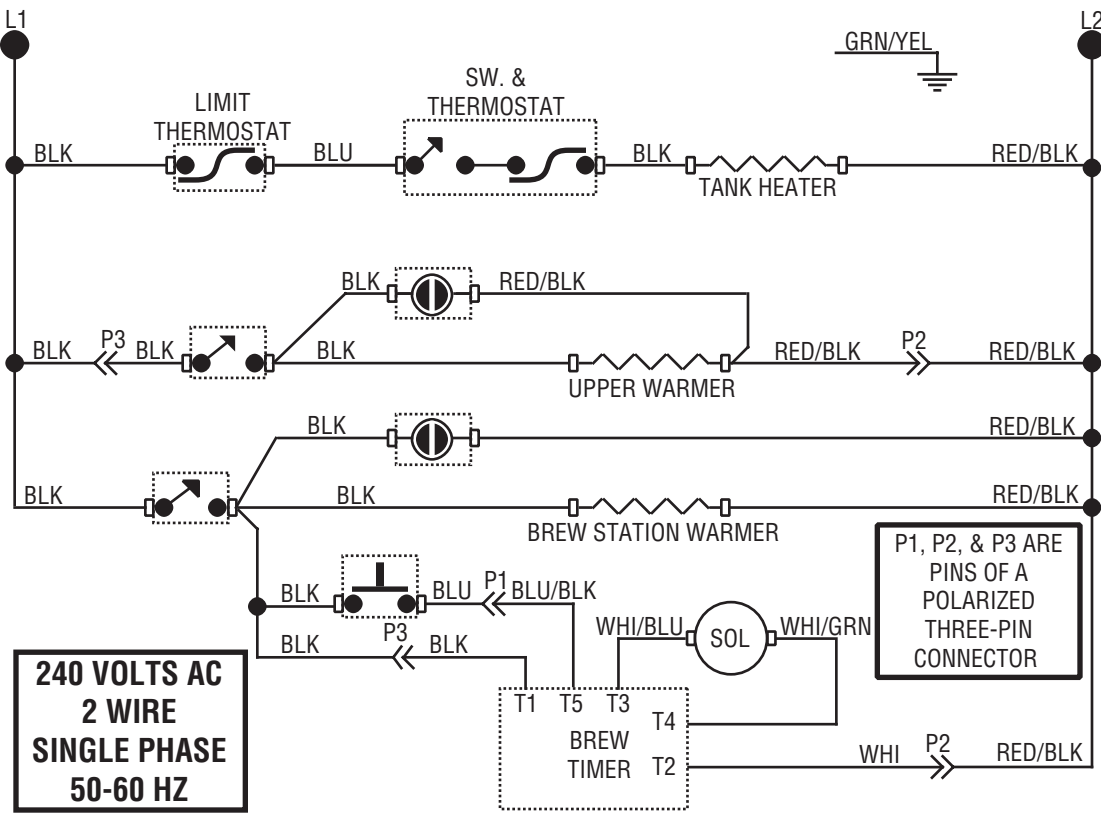
OT 15, OT 20 & OT 35



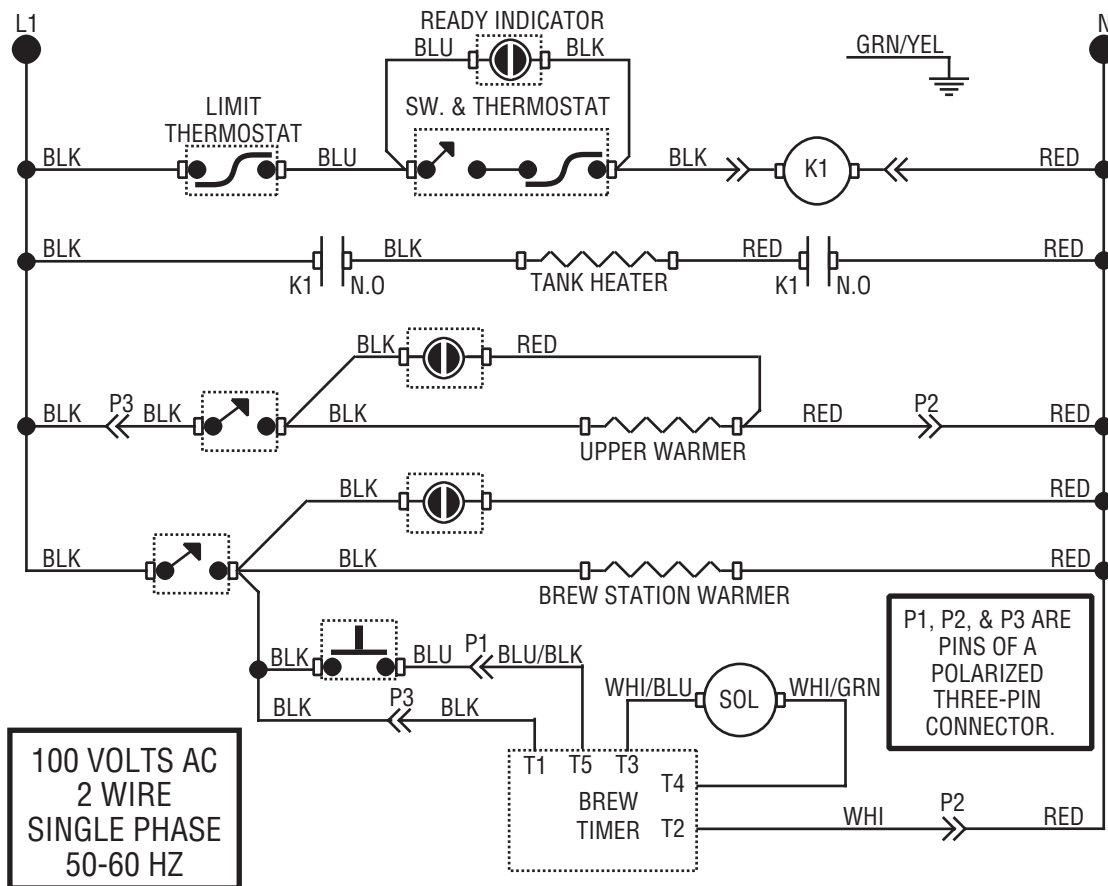
SCHEMATIC WIRING DIAGRAM OT



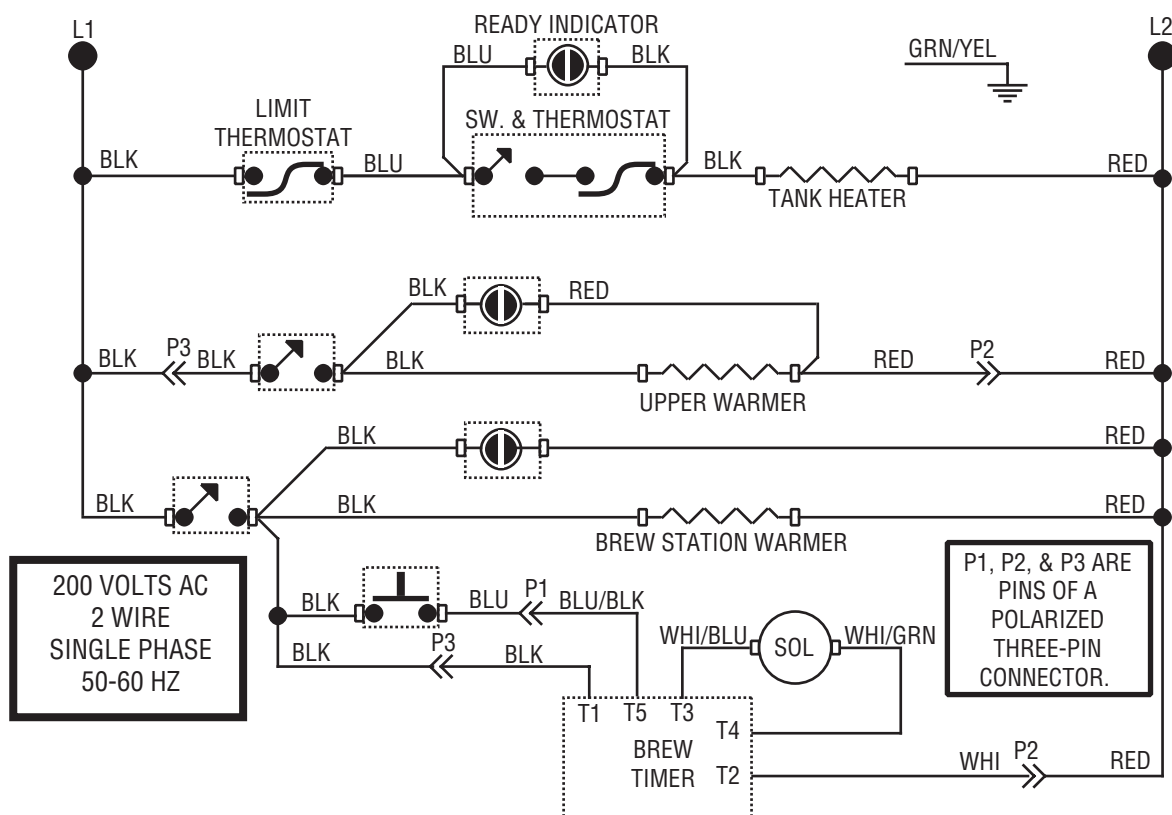
SCHEMATIC WIRING DIAGRAM OTA



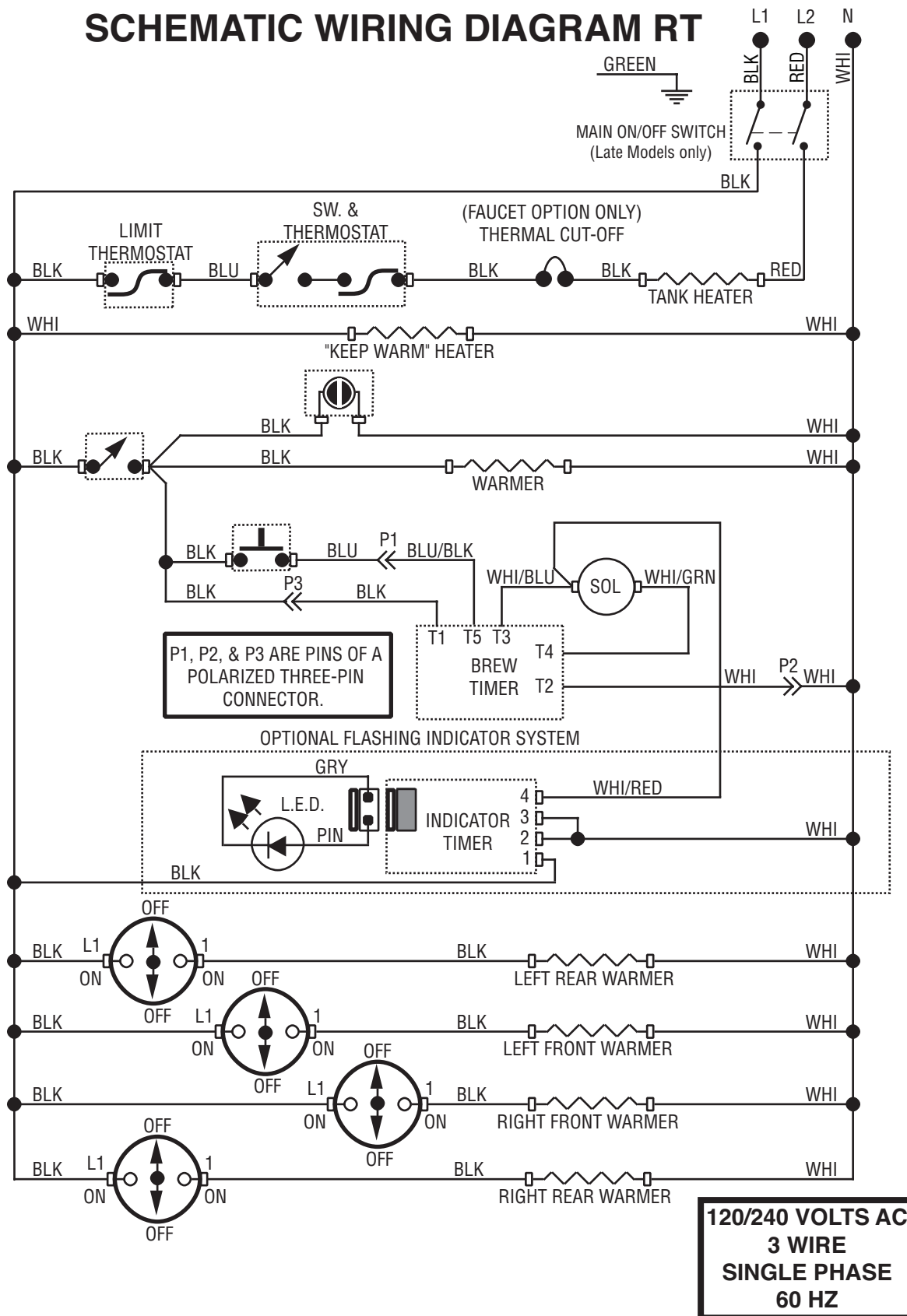
SCHEMATIC WIRING DIAGRAM OT25B



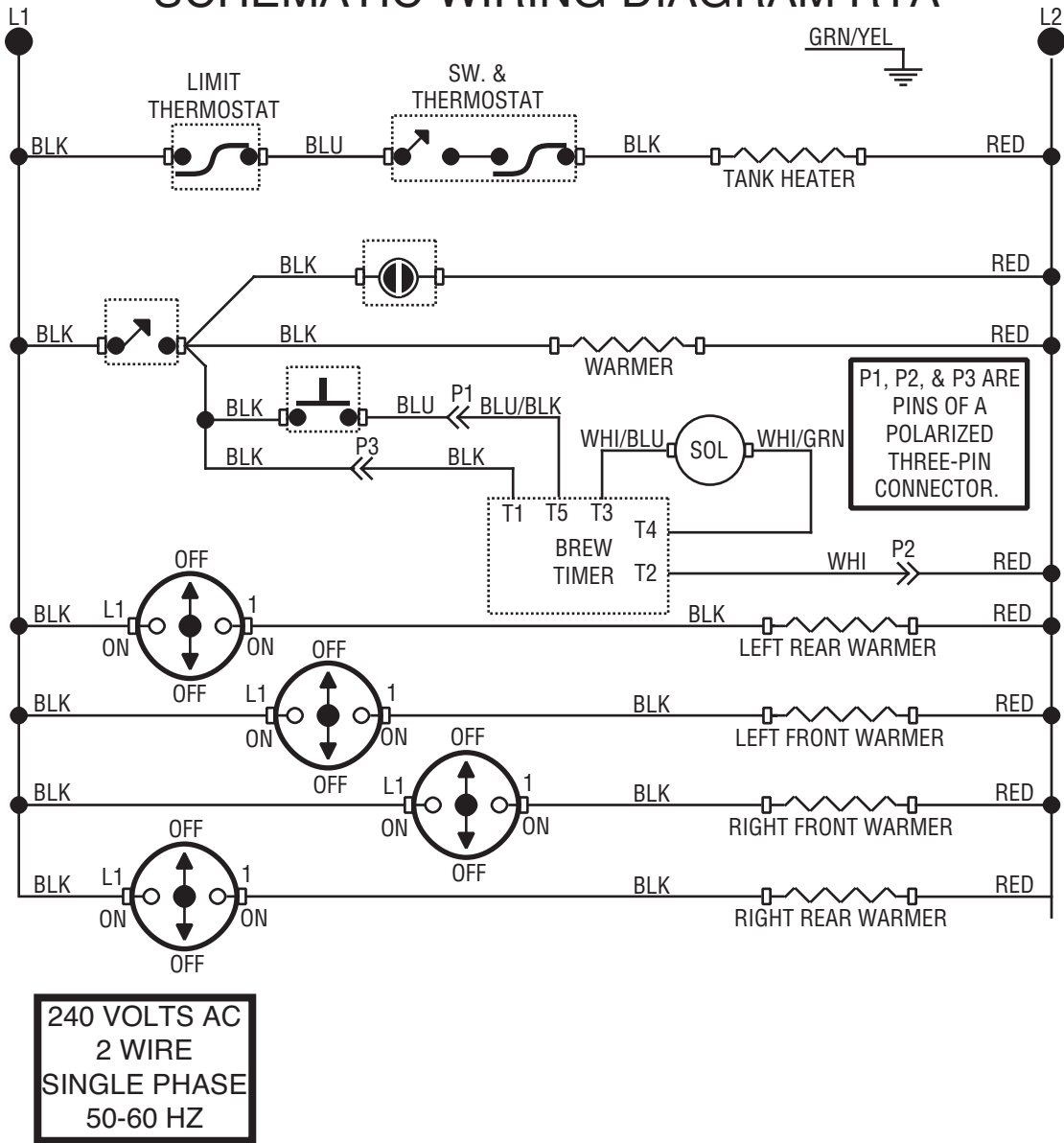
SCHEMATIC WIRING DIAGRAM OT35B



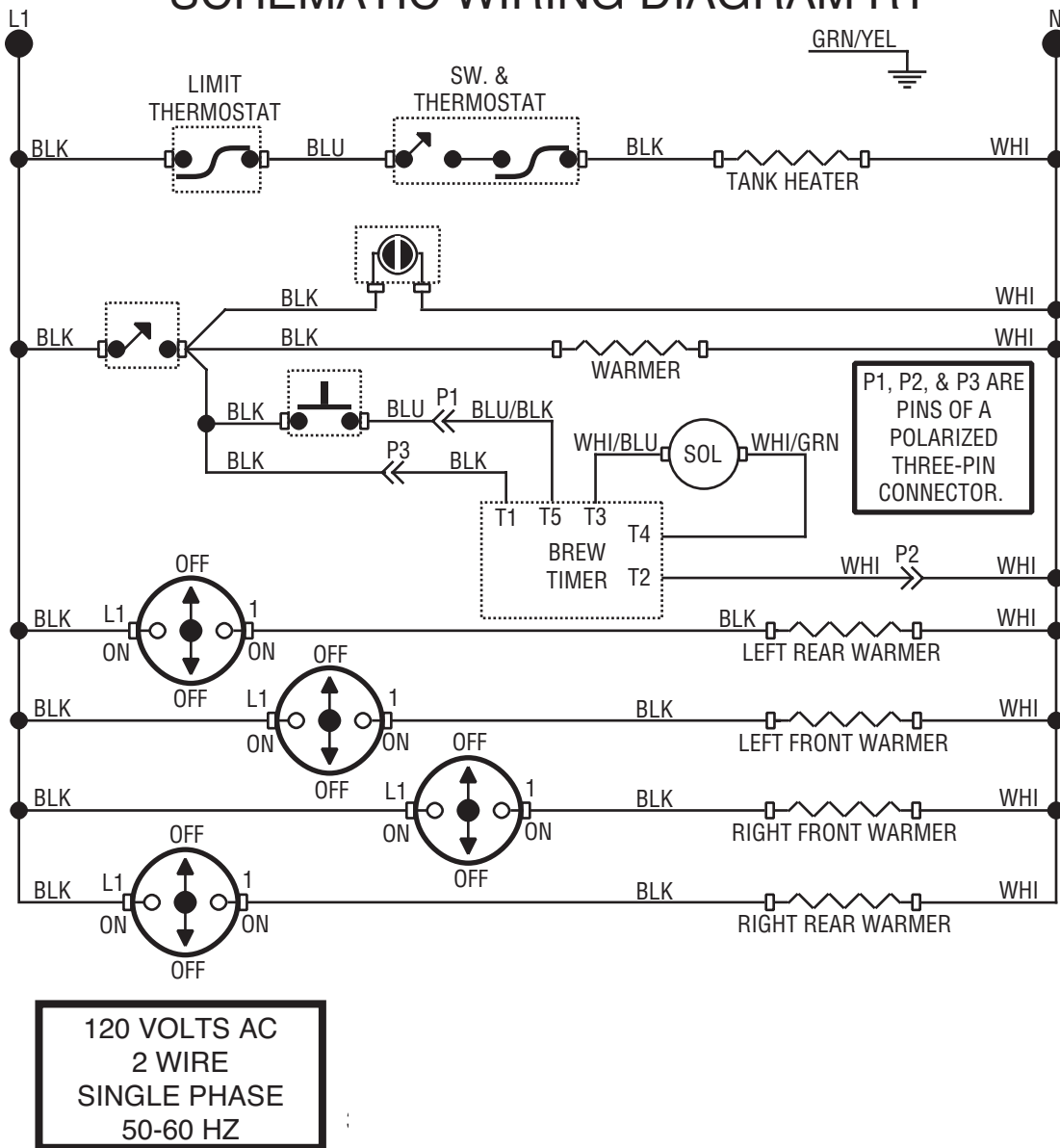
SCHEMATIC WIRING DIAGRAM RT



SCHEMATIC WIRING DIAGRAM RTA

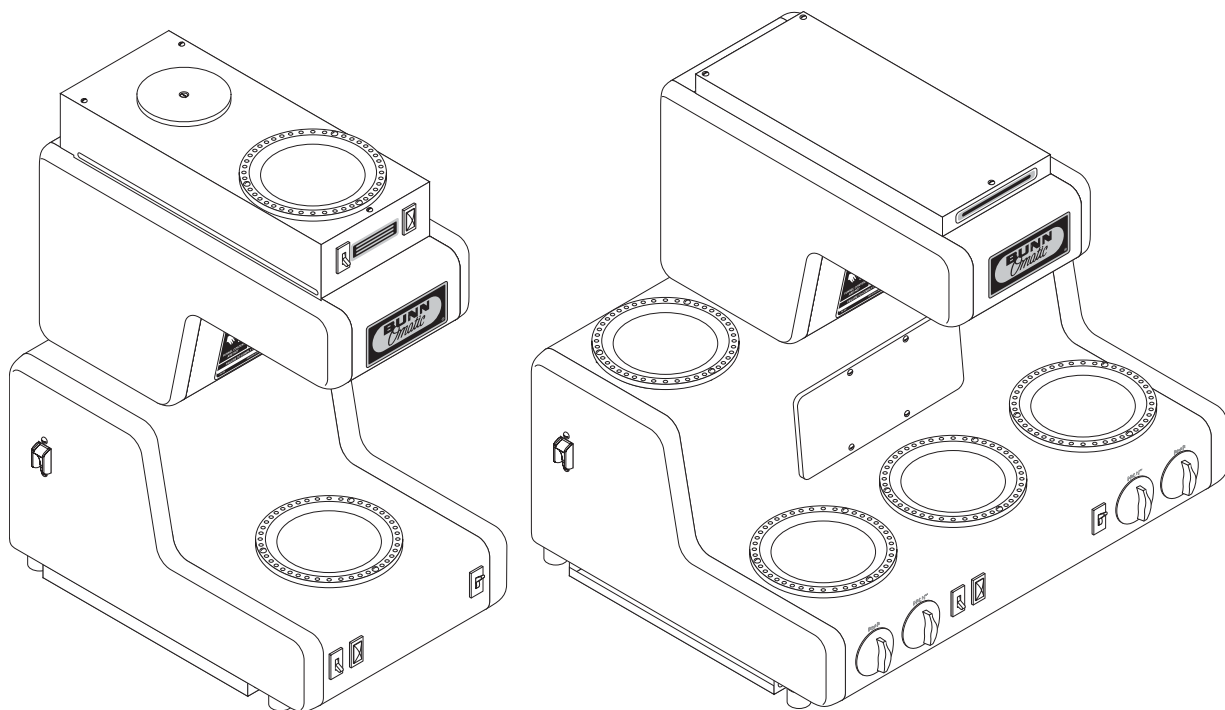


SCHEMATIC WIRING DIAGRAM RT



BUNN®

OL, RL OT, RT



ILLUSTRATED PARTS CATALOG

Designs, materials, weights, specifications, and dimensions for equipment or replacement parts are subject to change without notice.

BUNN-O-MATIC CORPORATION

POST OFFICE BOX 3227

SPRINGFIELD, ILLINOIS 62708-3227

PHONE: (217) 529-6601 FAX: (217) 529-6644

BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) All equipment other than as specified below: 2 years parts and 1 year labor.
- 2) Electronic circuit and/or control boards: parts and labor for 3 years.
- 3) Compressors on refrigeration equipment: 5 years parts and 1 year labor.
- 4) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis: parts and labor for 3 years or 30,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

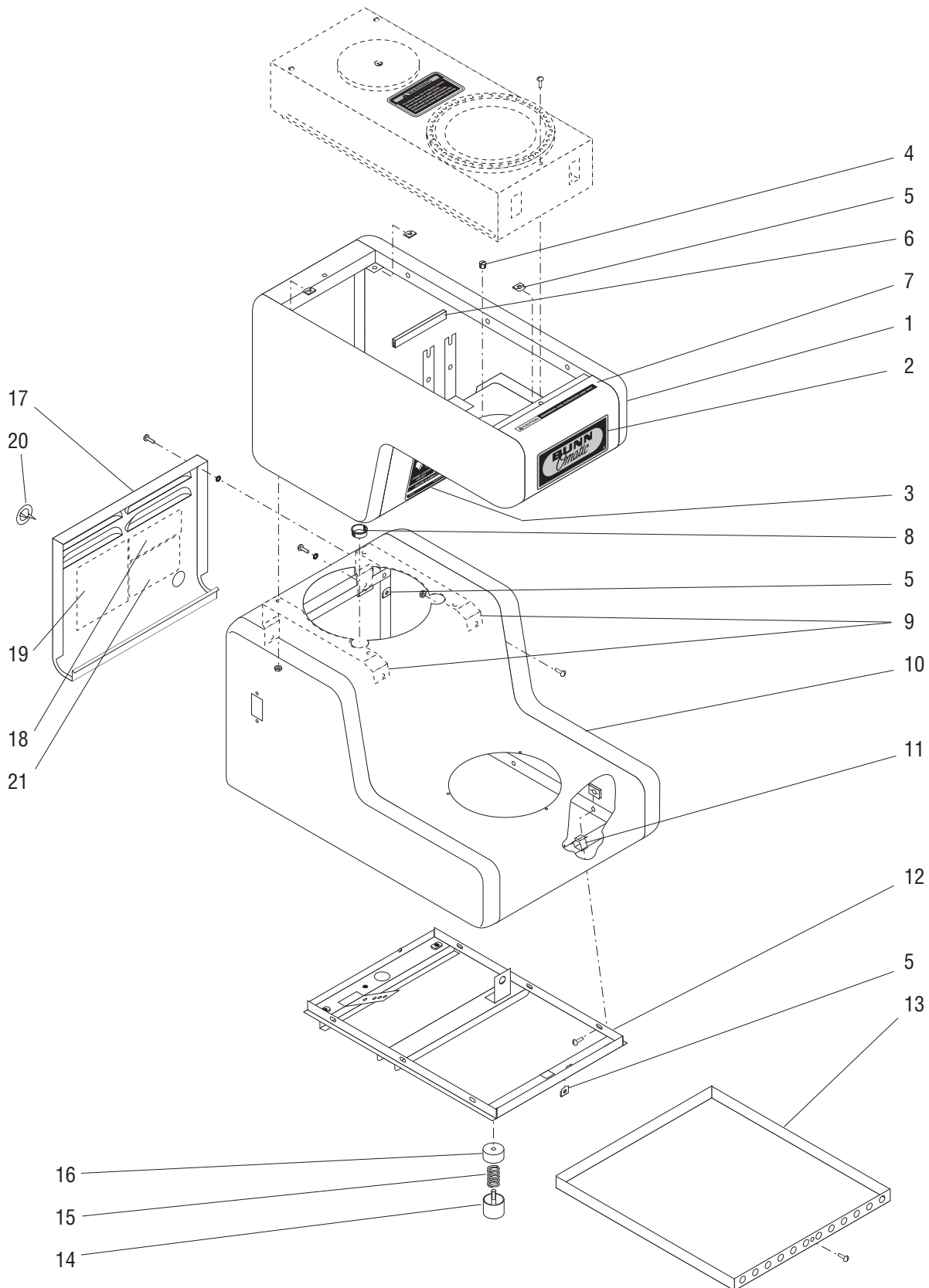
BrewWISE, BUNN Gourmet Ice, BUNN Pour-O-Matic, BUNN, Bunn-OMatic, Bunn-O-Matic, BUNNlink, BUNN-serve, BUNN Espresso, DBC, Dr. Brew, Dual, EasyClear, EasyGard, Easy Pour, FlavorGard, Gourmet Ice, Gourmet Juice, High Intensity, IMIX, Infusion Series, Legendary for Quality, Quality Beverage Equipment Worldwide, The Mark of Quality in Beverage Equipment Worldwide, My Café, PowerLogic, Safety-Fresh, Scale-Pro, Single, Smart Funnel, Smart Hopper, SmartWAVE, Soft Heat, SplashGard, System III, ThermoFresh, 392, AutoPOD, AX-IOM, Beverage Profit Calculator, Beverage Bar Creator, BrewLOGIC, BrewMETER, BrewWIZARD, BUNNSERVE, BUNNsource, Coffee At Its Best, Cool Froth, Digital Brewer Control, Intellisteam, Nothing Brews Like a BUNN, Pouring Profits, Pulse Wave, Signature Series, Silver Series, Smart Heat, Tea At Its Best, The Horizontal Red Line, Titan, Ultra, are either trademarks or registered trademarks of Bunn-O-Matic Corporation.

TABLE OF CONTENTS

ELECTRICAL & OPERATING CONTROLS (Model OL)	28
ELECTRICAL & OPERATING CONTROLS (Model RL)	32
ELECTRICAL & OPERATING CONTROLS (Model OT)	36
ELECTRICAL & OPERATING CONTROLS (Model RT)	40
FAUCET & TUBING (Model RTF & Models RT & OT with Faucet Conversion)	22
FUNNELS & BASKETS	44
HOUSINGS & PANELS (Model OL)	4
HOUSINGS & PANELS (Model RL)	6
HOUSINGS & PANELS (Model OT)	8
HOUSINGS & PANELS (Model RT)	10
NUMERICAL INDEX	46
STRAINER (Models OL & RL)	18
STRAINER/FLOW CONTROL (Models OT & RT)	20
TANK & COMPONENTS (Models OL & RL)	12
TANK & COMPONENTS (Models OT & RT)	16
WARMER ASSEMBLIES (Models OL & OT)	24
WARMER ASSEMBLIES (Models RL & RT)	26

BUNN®

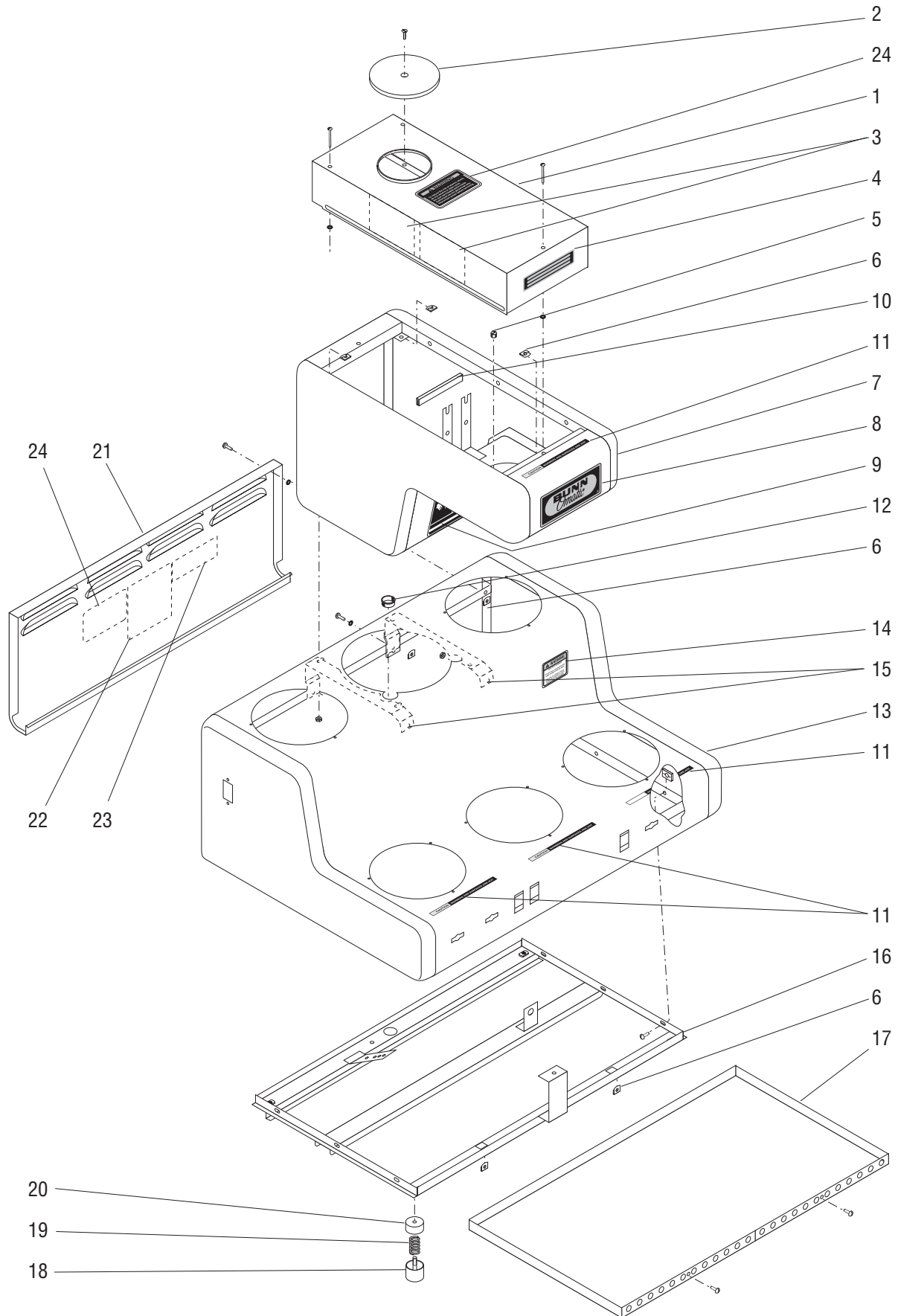
HOUSINGS & PANELS (Model OL)

**OL,RL
OT,RT**

HOUSINGS & PANELS (Model OL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	05103.1000	1	Hood w/Decals (Includes items 2 thru 7)
	05103.1001	1	Hood w/Decals (Includes items 2 thru 7) (Model OL25B only)
	01331.0000	2	Screw, RND SLTD #10-32 x .50" (Early models)
	00971.0000	4	Nut, KEPS #10-32
2	00823.0000	1	Decal, BUNN-O-MATIC
3	00658.0000	1	Decal, WARNING DECANter/FUNNEL
4	00462.0001	1	Plug
5	00917.0000	6	Fastener, "J" Type #8-32
6	-----	1	Gasket, U-Channel 3.50" (Order item 22)
7	12364.0000	2	Decal, Caution - Warmers are Hot
8	00606.0000	1	Bushing
9	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
10	05105.0000	1	Housing
	05105.1002	1	Housing (Models w/ Master ON/OFF Switch)
11	00927.0000	1	Clip, Cable
12	05102.0000*	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
13	05014.0000	1	Drip Tray
	01315.0000	1	Screw, Truss Head #8-32 x .375"
14	00754.0001	4	Foot/Locator
15	00751.0000	4	Spring
16	00752.0000	4	Cover
17	22358.1001	1	Panel w/Decals (Model OL-15)(Includes items 18 thru 21)
	22358.1000	1	Panel w/Decals (Models OL-20 & 35)(Includes items 18, 19 & 21)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
18	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
19	00831.0000	1	Decal, WARNING ELECTRICAL
20	00715.0000	1	Adapter, Strain Relief (Model OL-15 only)
21	37881.0000	1	Decal, No Serviceable Parts
22	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

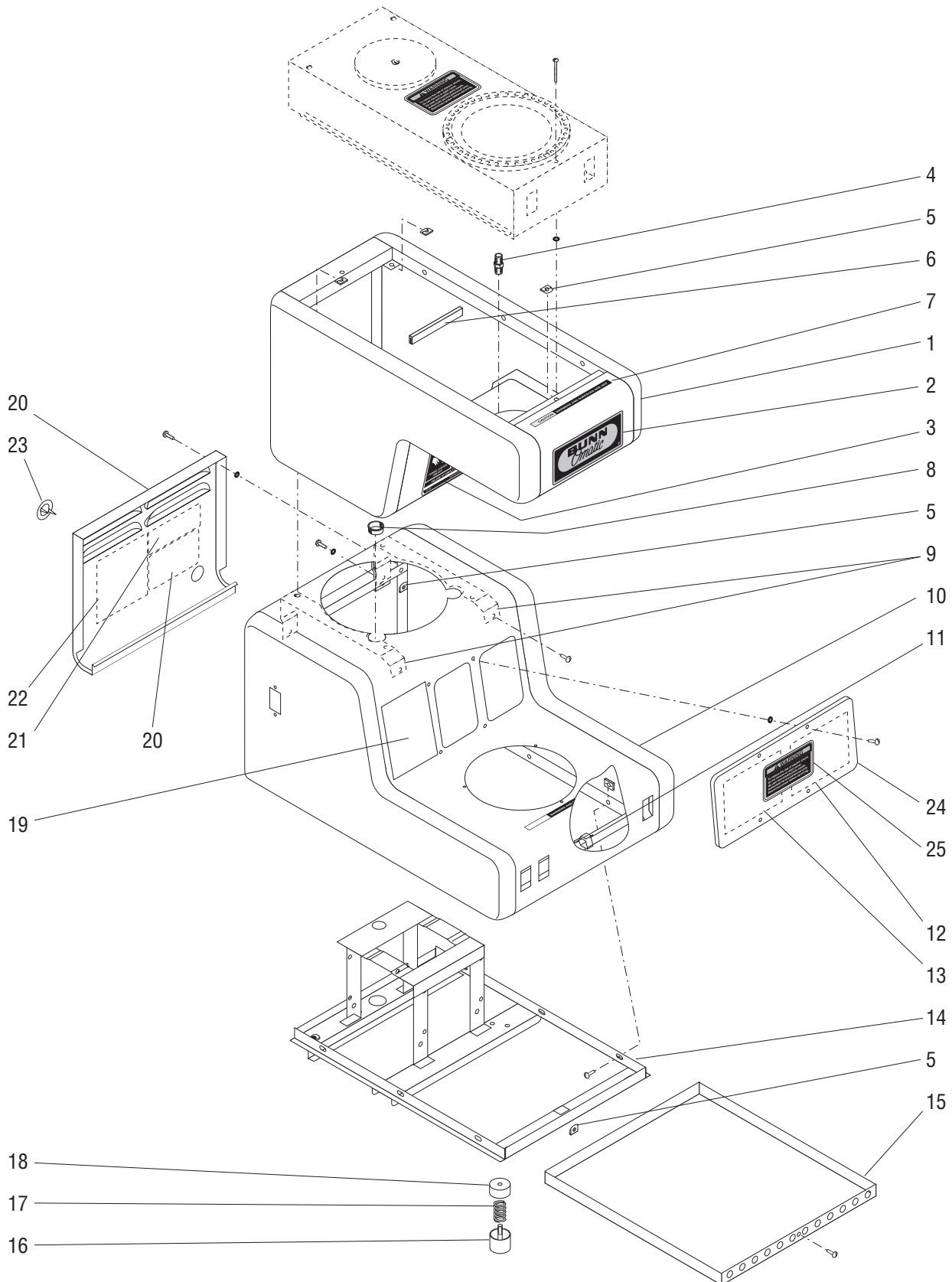
BUNN®**HOUSINGS & PANELS (Model RL)****OL,RL
OT,RT**

'1649.40

HOUSINGS & PANELS (Model RL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	03811.1000	1	Cover w/Decals (Includes items 2 thru 4 & 24)
	01371.0000	3	Screw, RND SLTD #8-32 x 4.0"
	01516.0000	3	Washer, Nylon Retaining
2	01189.0000	1	Lid
	01377.0000	1	Screw, FLH SLTD #8-32 x .75"
	00912.0000	1	Fastener, "J" Type #8-32
3	32424.0000	1	Schematic, Electrical
4	00803.0000	1	Decal, Decorative Stripe
5	00462.0001	1	Plug
6	00917.0000	7	Fastener, "J" Type #8-32
7	05103.1000	1	Hood w/Decals (Includes items 5 thru 11)
	01331.0000	2	Screw, RND SLTD #10-32 x .50" (Early models)
	00971.0000	4	Nut, KEPS #10-32
8	00823.0000	1	Decal, BUNN-O-MATIC
9	00658.0000	1	Decal, WARNING DECANter/FUNNEL
10	-----	1	Gasket, U-Channel 3.50" (Order item 25)
11	12364.0000	4	Decal, Caution - Warmers are Hot
12	00606.0000	1	Bushing
13	05092.1000	1	Housing w/Decal (Includes items 6,11,12 and 14)
	05092.0000	1	Housing (Models RLA only)
14	00688.0000	1	Decal, HIGH HEAT (Models with High Heat Warmer)
15	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
16	05101.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
17	05005.0000	1	Drip Tray
	01315.0000	2	Screw, Truss Head #8-32 x .375"
18	00754.0001	4	Foot/Locator
19	00751.0000	4	Spring
20	00752.0000	4	Cover
21	22351.1000	1	Panel w/Decals (Includes item 22 - 24)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
22	00831.0000	1	Decal, WARNING ELECTRICAL
23	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
24	37881.0000	2	Decal, No Serviceable Parts
25	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**HOUSINGS & PANELS (Model OT)****OL,RL
OT,RT**

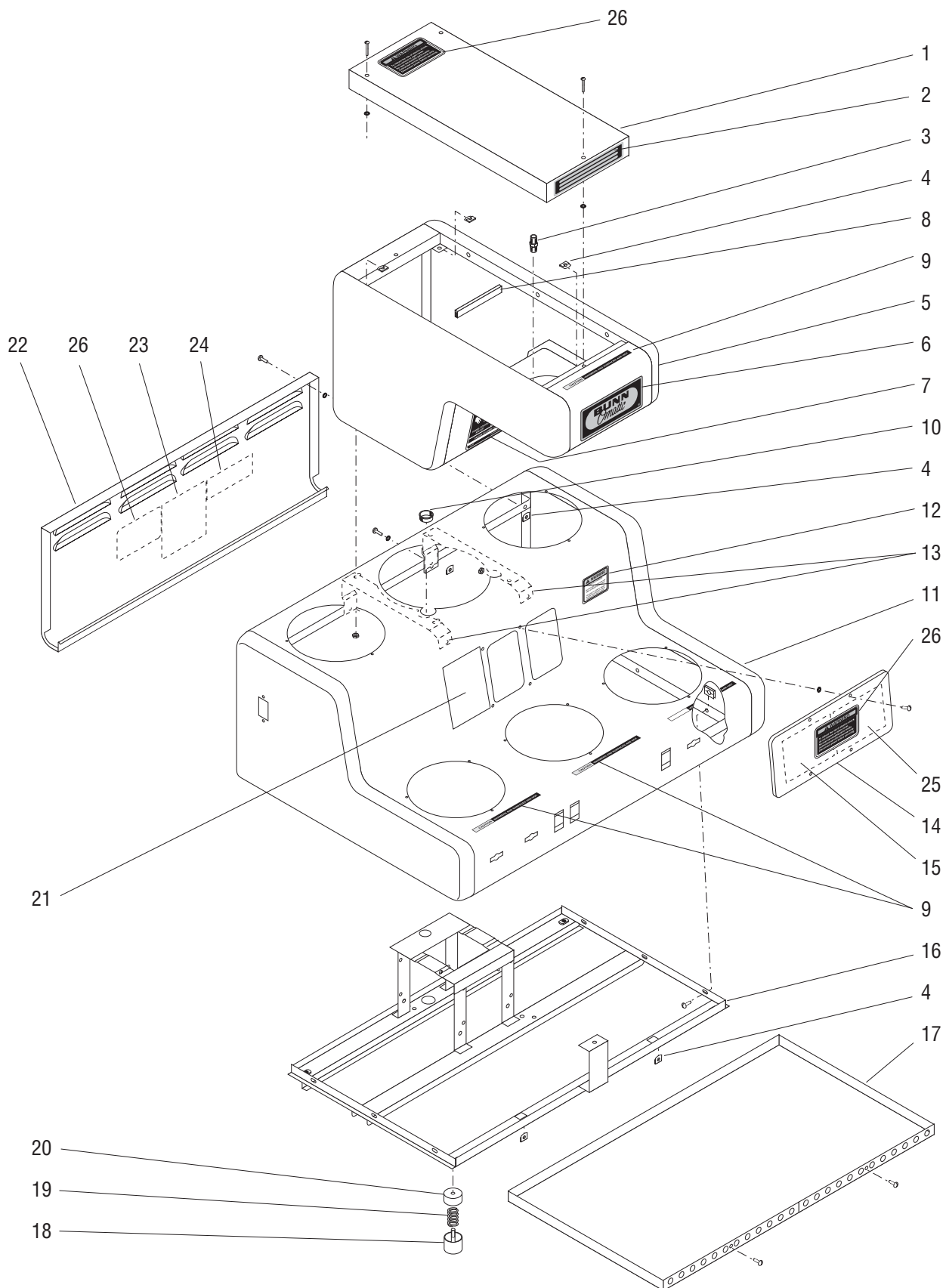
HOUSINGS & PANELS (Model OT)

ITEM	PART NO.	QTY.	DESCRIPTION
1	05025.1000	1	Hood w/Decals (Includes items 2 thru 7)
	05194.0000	1	Hood (Model OT35 w/Interface only)
	01331.0000	2	Screw, RND SLTD #10-32 x .50" (Early models)
	00971.0000	4	Nut, KEPS #10-32
2	00823.0000	1	Decal, BUNN-O-MATIC
	00875.0000	1	Decal, BUNN-O-MATIC (Model OT35 w/Interface only)
3	00658.0000	1	Decal, WARNING DECANter/FUNNEL
4	00406.0001	1	Connector
5	00917.0000	6	Fastener, "J" Type #8-32
6	-----	1	Gasket, U-Channel 3.50" (Order item 26)
7	12364.0000	2	Decal, Caution - Warmers are Hot
8	00606.0000	1	Bushing
9	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
10	05023.1000	1	Housing w/Decal (Includes items 5,7,8 & 10)
	05023.0002*	1	Housing (Models w/ Master ON/OFF Switch)
11	00927.0000	1	Clip, Cable
12	22357.1003	1	Cover w/Decal (Includes items 13 & 25)
	01318.0000	4	Screw, RND SLTD #8-32 x .50"
	01516.0000	4	Washer, Nylon Retaining
13	10278.0000	1	Schematic, Electrical
14	04974.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
15	05014.0000	1	Drip Tray
	01315.0000	1	Screw, Truss Head #8-32 x .375"
16	00754.0001	4	Foot/Locator
17	00751.0000	4	Spring
18	00752.0000	4	Cover
19	00774.0000	1	Decal, CAUTION-THERMOSTAT
20	22358.1002	1	Panel w/Decals (Model OT-15)(Includes items 21 thru 23 & 25)
	22358.1000	1	Panel w/Decals (Models OT-20 & 35)(Shown)(Includes items 21 & 22)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
21	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
22	00831.0000	1	Decal, WARNING ELECTRICAL
23	00715.0000	1	Adapter, Strain Relief (Model OT-15 only)
24	32540.0000	1	Decal, Timer Setting Instructions (Models with Digital Timer)
25	37881.0000	2	Decal, No Serviceable Parts
26	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®

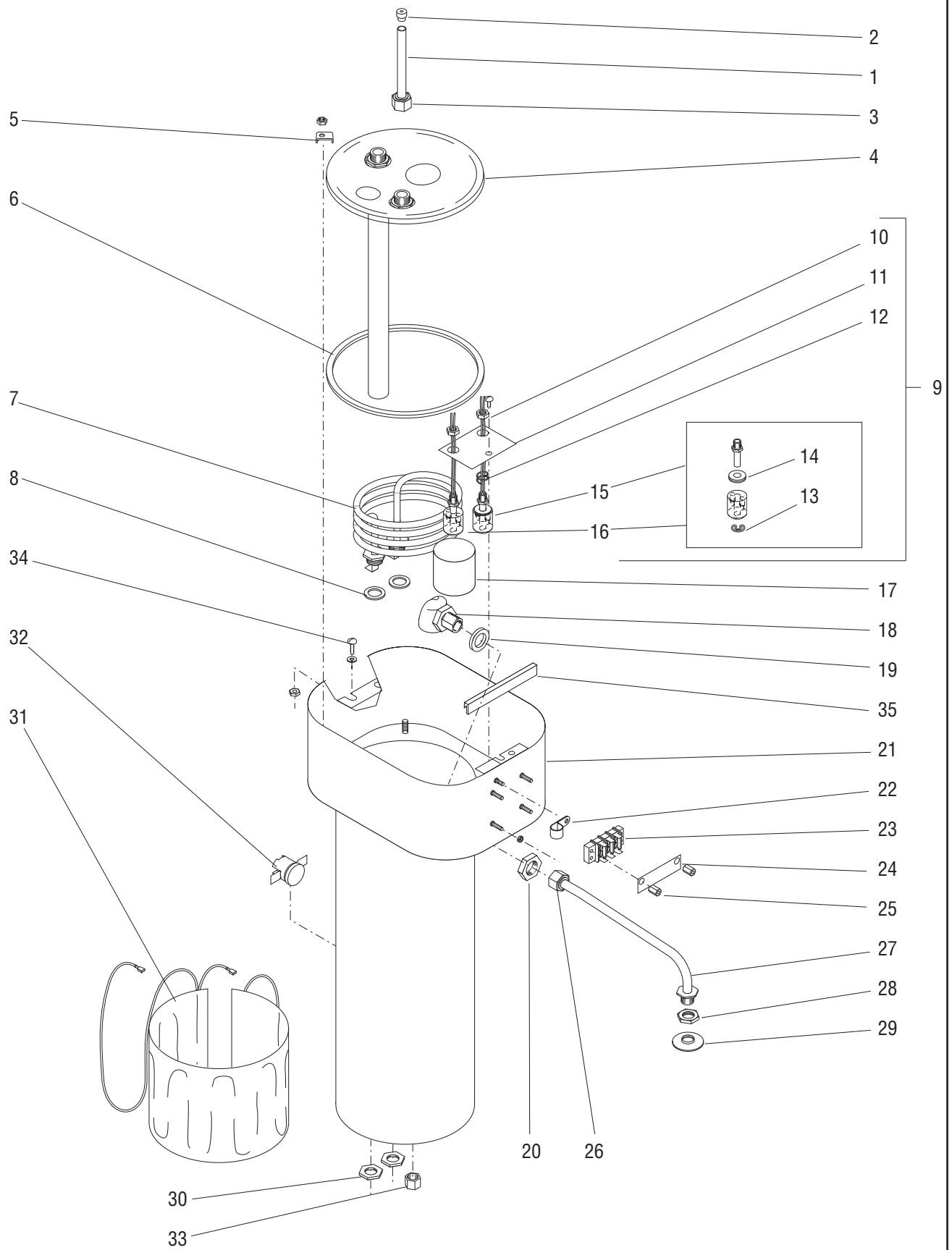
HOUSINGS & PANELS (Model RT)

**OL,RL
OT,RT**

HOUSINGS & PANELS (Model RT)

ITEM	PART NO.	QTY.	DESCRIPTION
1	22428.1000	1	Cover w/Decals (Includes items 2 & 26)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01322.0000	1	Screw, RND SLTD #8-32 x 1.5"
	01516.0000	3	Washer, Nylon Retaining
2	00822.0000	1	Decal, Decorative Stripe
3	00406.0001	1	Connector
4	00917.0000	7	Fastener, "J" Type #8-32
5	05025.1000	1	Hood w/Decals (Includes items 3 thru 9)
	05025.1002	1	Hood w/Decals (Includes items 3 thru 9) (Model RTF or Models RT & OT with Faucet Conversion)
	01331.0000	2	Screw, RND SLTD #10-32 x .50" (Early models)
	00971.0000	4	Nut, KEPS #10-32
6	00823.0000	1	Decal, BUNN-O-MATIC
	00875.0000	1	Decal, BUNN-O-MATIC (Model RTF or Models RT & OT with Faucet Conversion)
7	00658.0000	1	Decal, WARNING DECANter/FUNNEL
8	-----	1	Gasket, U-Channel 3.50" (Order item 27)
9	12364.0000	4	Decal, Caution - Warmers are Hot
10	00606.0000	1	Bushing
11	05027.1000	1	Housing w/Decal (Includes items 4, 10 and 12)
	05027.0002*	1	Housing (Models w/ Master ON/OFF Switch)
12	00688.0000	1	Decal, HIGH HEAT (Models with High Heat Warmer)
13	05016.0000	1	Bracket, Right
	05017.0000	1	Bracket, Left
	02310.0000	2	Screw, Truss Head #10-32 x .50"
	00971.0000	2	Nut, KEPS #10-32
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
	01512.0000	2	Lockwasher, External-tooth #10
14	22357.1002	1	Cover w/Decal (Includes items 15 & 26)
	01318.0000	4	Screw, RND SLTD #8-32 x .50"
	01516.0000	4	Washer, Nylon Retaining
15	10277.0000	1	Schematic, Electrical (Models without High Heat Warmer)
	32423.0000	1	Schematic, Electrical (Models with High Heat Warmer)
16	04970.0000	1	Chassis
	01311.0000	6	Screw, Truss Head #8-32 x .25"
	00978.0000	6	Fastener, Flat Type #8-32
17	05005.0000	1	Drip Tray
	01315.0000	2	Screw, Truss Head #8-32 x .375"
18	00754.0001	4	Foot/Locator
19	00751.0000	4	Spring
20	00752.0000	4	Cover
21	00774.0000	1	Decal, CAUTION-THERMOSTAT
22	22351.1000	1	Panel w/Decals (Includes item 23, 24 & 26)
	01320.0000	2	Screw, RND SLTD #8-32 x 1.0"
	01516.0000	2	Washer, Nylon Retainer
23	00831.0000	1	Decal, WARNING ELECTRICAL
24	00656.0000	1	Decal, COMPLIANCE TO PLUMBING CODE
25	32540.0000	1	Decal, Timer Setting Instructions (Models with Digital Timer)
26	37881.0000	2	Decal, No Serviceable Parts
27	02434.1000	-	Gasket, U-Channel 18.0" (Use as required)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**TANK & COMPONENTS (Models OL & RL)****OL,RL
OT,RT**

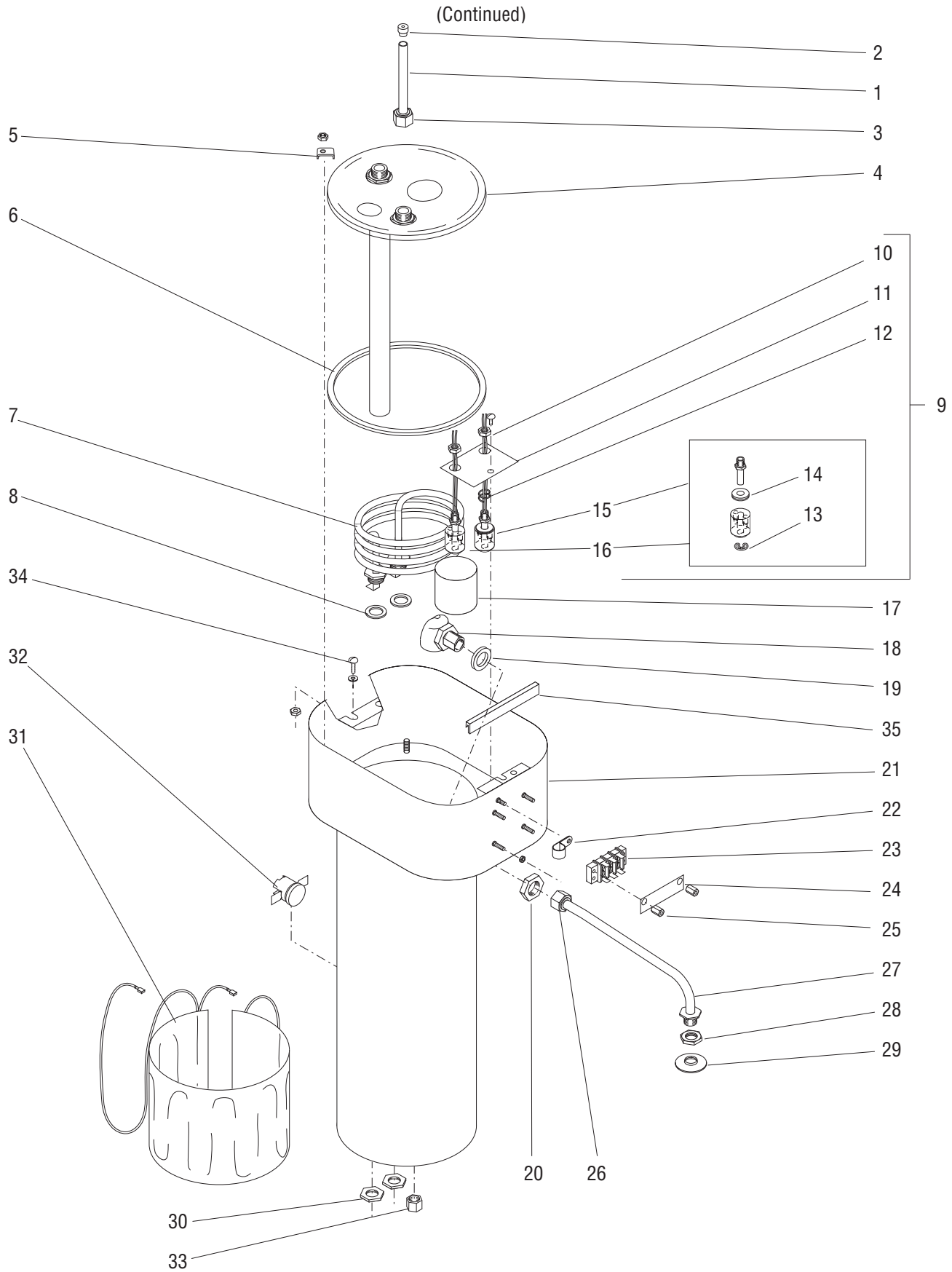
P1652

TANK & COMPONENTS (Models OL & RL)

ITEM	PART NO.	QTY.	DESCRIPTION
-	05033.1000	1	Tank Assy (1425W, 120V)(Includes items 1 thru 33)
	05032.1000	1	Tank Assy (1800W, 120V)(Includes items 1 thru 33)
	05038.0000	1	Tank Assy (3500W, 120/240V)(Includes items 1 thru 33)
	-----	1	Tank Assy (3500W, 230V)(Includes items 1 thru 33)
	-----	1	Tank Assy (2500W, 100V)(Includes items 1 thru 33)
	-----	1	Tank Assy (3500W, 200V)(Includes items 1 thru 33)
1	20768.0000	1	Tube Assy (Includes item 2)
2	03989.0000	1	Grommet
3	00929.0001	1	Fitting, Compression
4	05078.0000	1	Lid, Tank
5	02775.0000	4	Bracket, Hold Down
	00908.0000	4	Nut, Hex #8-32
6	02747.0000	1	Gasket, Tank Lid
7	02755.1000	1	Element, Tank Heater (1425W, 120V)(Includes item 8)
	02756.1000	1	Element, Tank Heater (1800W, 120V)(Includes item 8)
	05037.1000	1	Element, Tank Heater (3500W, 240V)(Includes item 8)
	05036.1000	1	Element, Tank Heater (2500W, 100V)(Includes item 8)
	20942.1000	1	Element, Tank Heater (3500W, 200V)(Includes item 8)
8	00943.0000	2	Gasket
9	05110.1000	1	Float Switch Assy (Includes items 10 thru 14)
	02308.0000	1	Screw, PNH SLTD #8-32 x .375"
10	00946.0000	2	Nut, Hex Brass .125-27
11	05084.0000	1	Bracket
12	05108.0000	1	Spring
13	03807.0000	1	Ring, Retaining
14	01527.0000	3	Washer, Adjusting
15	05106.0000	1	Float Switch (Includes items 13 & 14)
16	05106.0001	1	Float Switch (Includes item 13)
17	05082.0000	1	Overflow Cup
18	02713.0000	1	Syphon
19	02746.0000	1	Gasket
20	02745.0000	1	Nut
21	05039.0000	1	Tank
22	04831.0000	1	Clip
	00970.0000	2	Nut, KEPS #8-32

(Continued)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

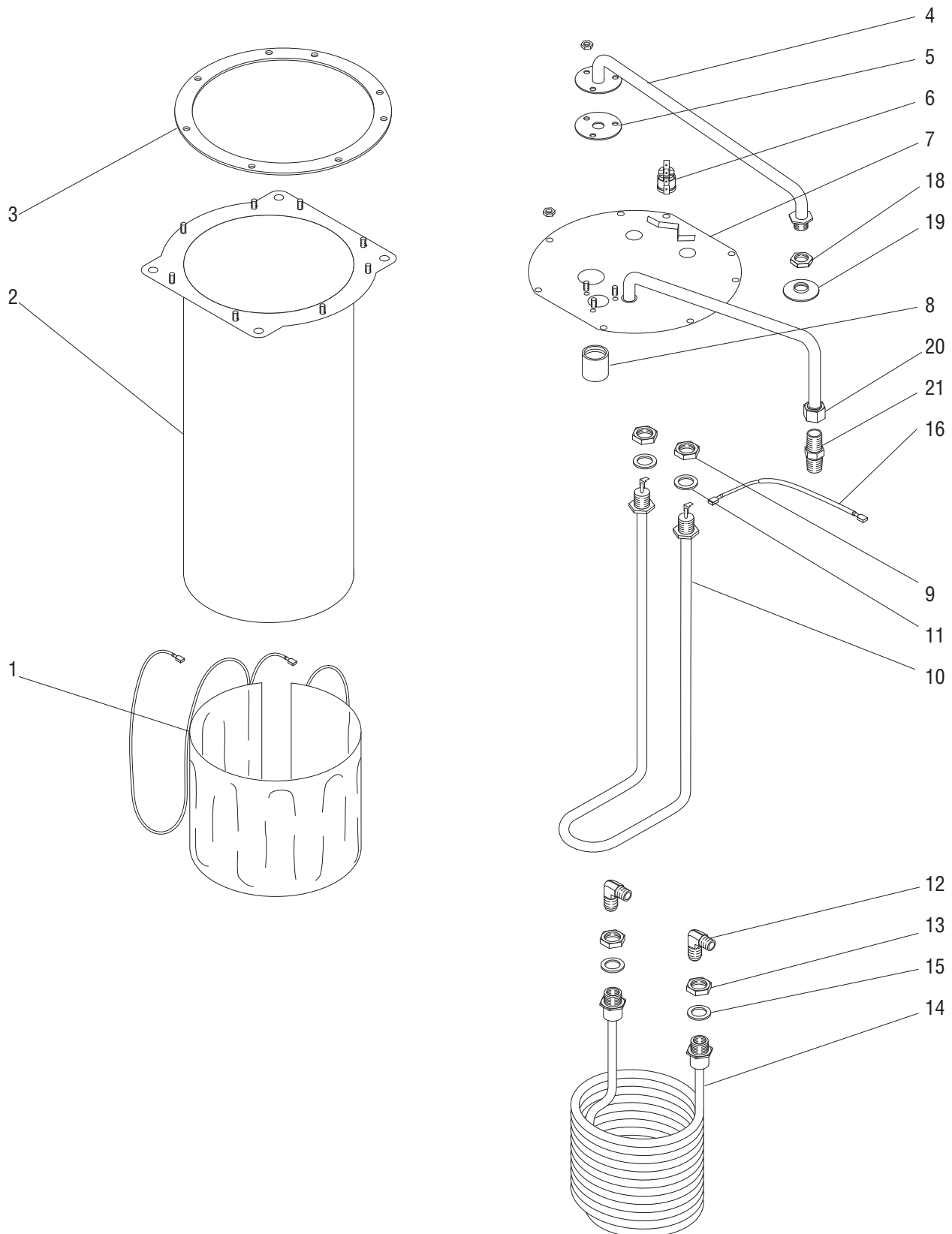
BUNN®**TANK & COMPONENTS (Models OL & RL)****OL,RL
OT,RT**

P1652

TANK & COMPONENTS (Models OL & RL)

ITEM	PART NO.	QTY.	DESCRIPTION
23	05067.0000	1	Terminal Block
24	05070.0000	1	Plate
	00970.0000	2	Nut, KEPS #8-32
25	00932.0000	2	Spacer
26	00929.0001	1	Fitting, Compression
27	05031.0000	1	Tube, Sprayhead (Includes item 26)
28	01075.0000	1	Nut, Sprayhead
29	01082.0000	1	Sprayhead
30	00942.0000	2	Nut
31	04626.0000	1	Blanket Heater (120V)
	01928.0000	1	Blanket Heater (240V)
32	29329.1000	1	Limit Thermostat
33	00935.0001	1	Cap
	24684.0000	1	Gasket, Copper
34	01370.0000	1	Screw, PNH SLTD #8-32 x .75"
	01522.0000	1	Washer
	00908.0000	1	Nut, Hex #8-32
35	-----	1	Gasket, U-Channel 3.50" (Order item 36)
36	02434.1000	-	Gasket, U-Channel 18.0" (Use As Required)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

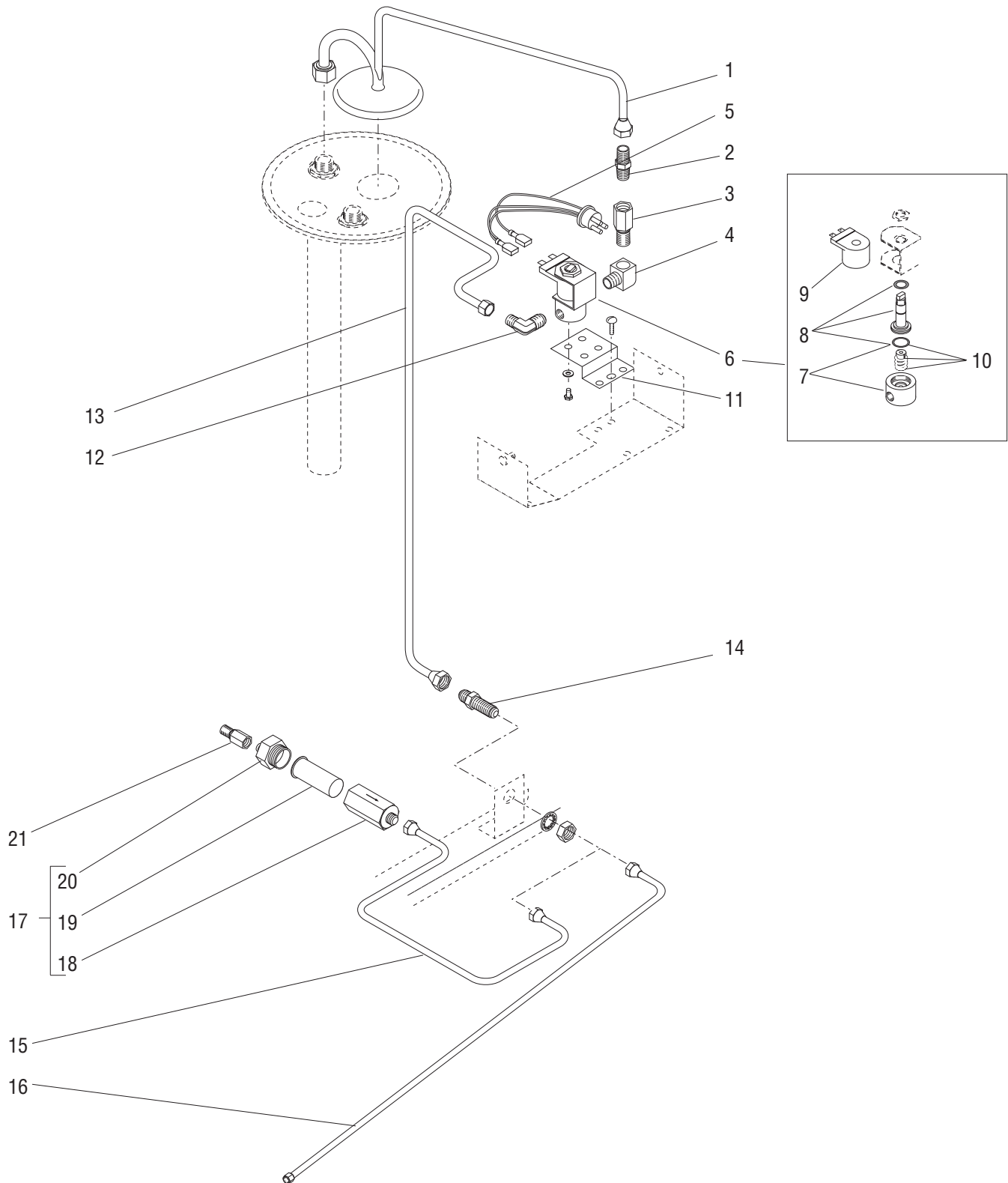
BUNN®**TANK & COMPONENTS (Models OT & RT)****OL,RL
OT,RT**

P1653

TANK & COMPONENTS (Models OT & RT)

ITEM	PART NO.	QTY.	DESCRIPTION
-	05682.1000	1	Tank Assy (1320W, 120V)(Includes items 1 thru 11)
	05683.1000	1	Tank Assy (1800W, 120V)(Includes items 1 thru 11)
	05684.0000	1	Tank Assy (3500W, 120/240V)(Includes items 1 thru 11)
	-----	1	Tank Assy (3500W, 240V)(Includes items 1 thru 11)
	-----	1	Tank Assy (Model RTF only)(3500W, 120/240V)(Includes items 1 thru 17)
1	04626.0000	1	Blanket Warmer (120V)
	04626.0001	1	Blanket Warmer (120V)(Models w/ Master ON/OFF Switch)
	01928.0000	1	Blanket Warmer (240V)
2	04129.0000	1	Tank
3	04221.0000	1	Gasket, Tank Lid
4	05553.0000	1	Tube Kit, Sprayhead (Includes items 5 and 8)
	00908.0000	3	Nut
5	05515.0000	1	Gasket
6	29329.1000	1	Limit Thermostat
7	05533.0000	1	Tank Lid
	05533.0002	1	Tank Lid (Model RTF or Models RT & OT with Faucet Conversion)
	00908.0000	8	Nut
8	05518.0000	1	Hub, Syphon
9	00942.0000	2	Nut
10	04236.1000	1	Element, Tank Heater (1320W, 120V)(Includes item 11)
	04636.1000	1	Element, Tank Heater (1800W, 120V)(Includes item 11)
	04637.1000	1	Element, Tank Heater (3500W, 120/240V)(Includes item 11)
11	00943.0000	2	Gasket
12	00400.0001	2	Fitting, Elbow (Model RTF or Models RT & OT with Faucet Conversion)
13	12687.0000	2	Nut (Model RTF or Models RT & OT with Faucet Conversion)
14	12689.1000	1	Coil Assy (Includes item 15) (Model RTF or Models RT & OT with Faucet Conversion)
15	12688.0000	2	Gasket (Model RTF or Models RT & OT with Faucet Conversion)
16	20211.0100	1	Thermal Fuse (Model RTF or Models RT & OT with Faucet Conversion)
17	21016.0122	1	Lead, Black 4.0" (Not Illustrated)(Model RTF or Models RT & OT with Faucet Conversion)
18	01075.0000	1	Nut, Sprayhead
19	01082.0000	1	Sprayhead
20	00929.0001	1	Fitting, Compression
21	00406.0001	1	Connector

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

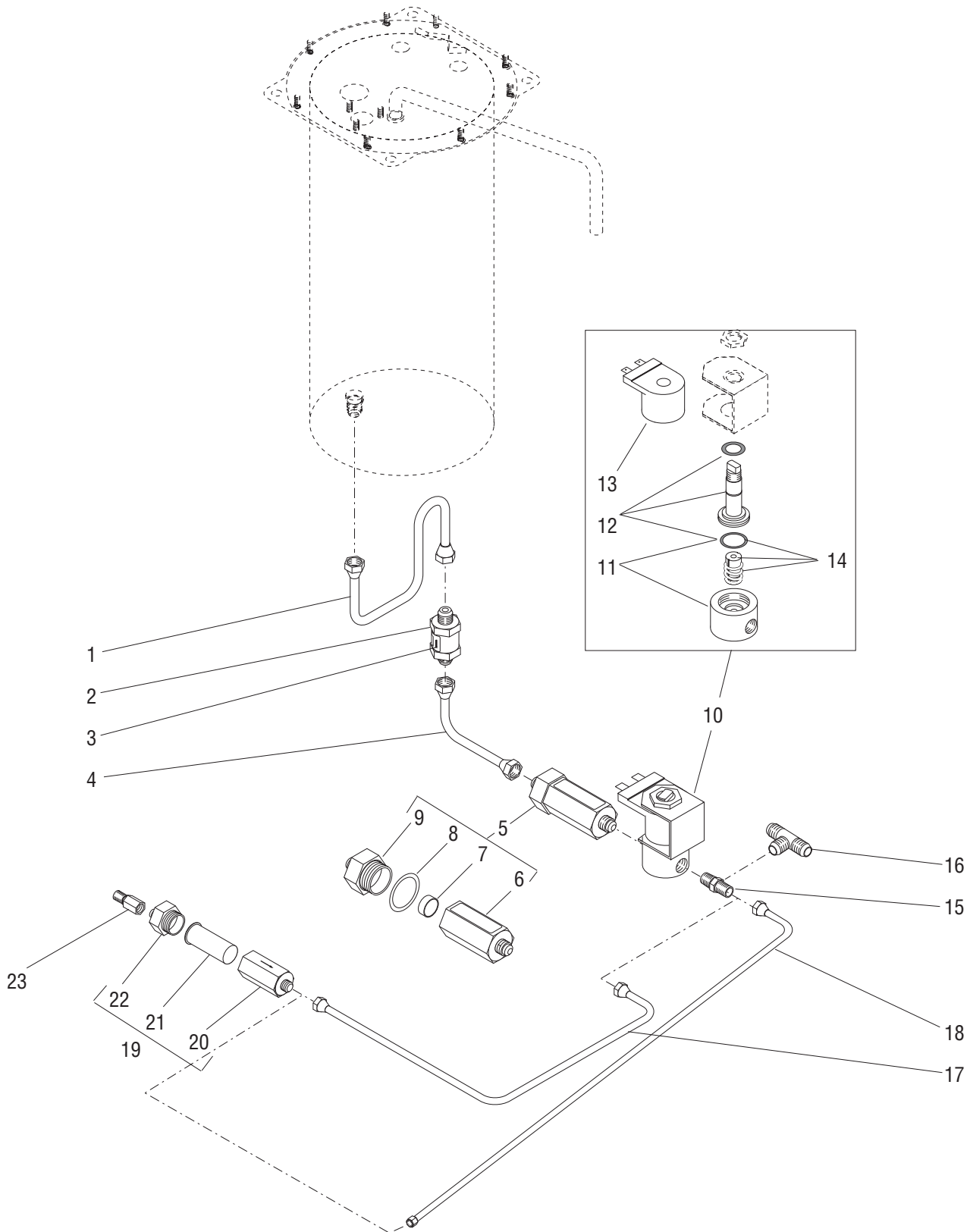
BUNN®**STRAINER (Models OL & RL)****OL,RL
OT,RT**

P1654

STRAINER (Models OL & RL)

ITEM	PART NO.	QTY.	DESCRIPTION
1	05096.0000	1	Tube, Fill Basin
2	00402.0001	1	Connector
3	00458.0001	1	Adapter
4	00432.0001	1	Elbow
5	03820.0000	1	Lead, Solenoid Jumper
6	-----	1	Solenoid, 120V, 1.48" Dia Coil (Not available, order 01085.0002)
	01085.0002	1	Solenoid, 120V, 1.00" Dia Coil (Includes items 7 thru 10)
	01975.0000	1	Solenoid, 240V (Includes items 7 thru 10)
	01138.0000	1	Solenoid, 100V (Includes items 7 thru 10)
	21180.0000	1	Solenoid, 200V (Includes items 7 thru 10)
	01327.0000	2	Screw, PNH PHH #10-32 x .375"
	01502.0000	2	Lockwasher, #10
7	-----	1	Solenoid Valve Base, 1.48" Dia Coil (Not available, order 01085.0002)
	28479.0000	1	Solenoid Valve Base Kit, 1.00" Dia Coil (Includes O-ring)
8	01116.0000	1	Guide, 1.48" Dia Coil
	28481.0000	1	Guide Kit, 1.0" Dia Coil (Includes Washer and O-ring)
9	01101.0000	1	Solenoid Valve Coil, 120V, 1.48" Dia Coil
	28480.0000	1	Solenoid Valve Coil, 120V, 1.00" Dia Coil
	21181.0000	1	Solenoid Valve Coil, 200V
	01100.0000	1	Solenoid Valve Coil, 240V
	01139.0000*	1	Solenoid Valve Coil, 100V
10	01111.0000	1	Solenoid Valve Repair Kit, 1.48" Dia Coil (Includes Plunger, Seal and Spring)
	01111.0002	1	Solenoid Valve Repair Kit, 1.00" Dia Coil (Includes Plunger, Spring and O-ring)
11	20201.4300	1	Bracket
	02308.0000	1	Screw, PNH SLTD #8-32 x .375"
12	00465.0001	1	Elbow
13	05119.0000	1	Tube
14	00459.0001	1	Fitting, Bulkhead
	01532.0000	1	Lockwasher, Internal-tooth .438"
	00463.0000	1	Nut, Hex .438-20"
15	01119.0000	1	Tube (Model OL-15 only)
16	01104.0000	1	Tube
17	23820.1000	1	Strainer (Includes items 18 thru 20)
18	-----	1	Body (Order item 17)
19	23721.0000	1	Screen
20	22249.0000	1	Cap, End
21	22293.0000	1	Adapter (Model OL-15 only)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**STRAINER/FLOW CONTROL (Models OT & RT)****OL,RL
OT,RT**

P1655

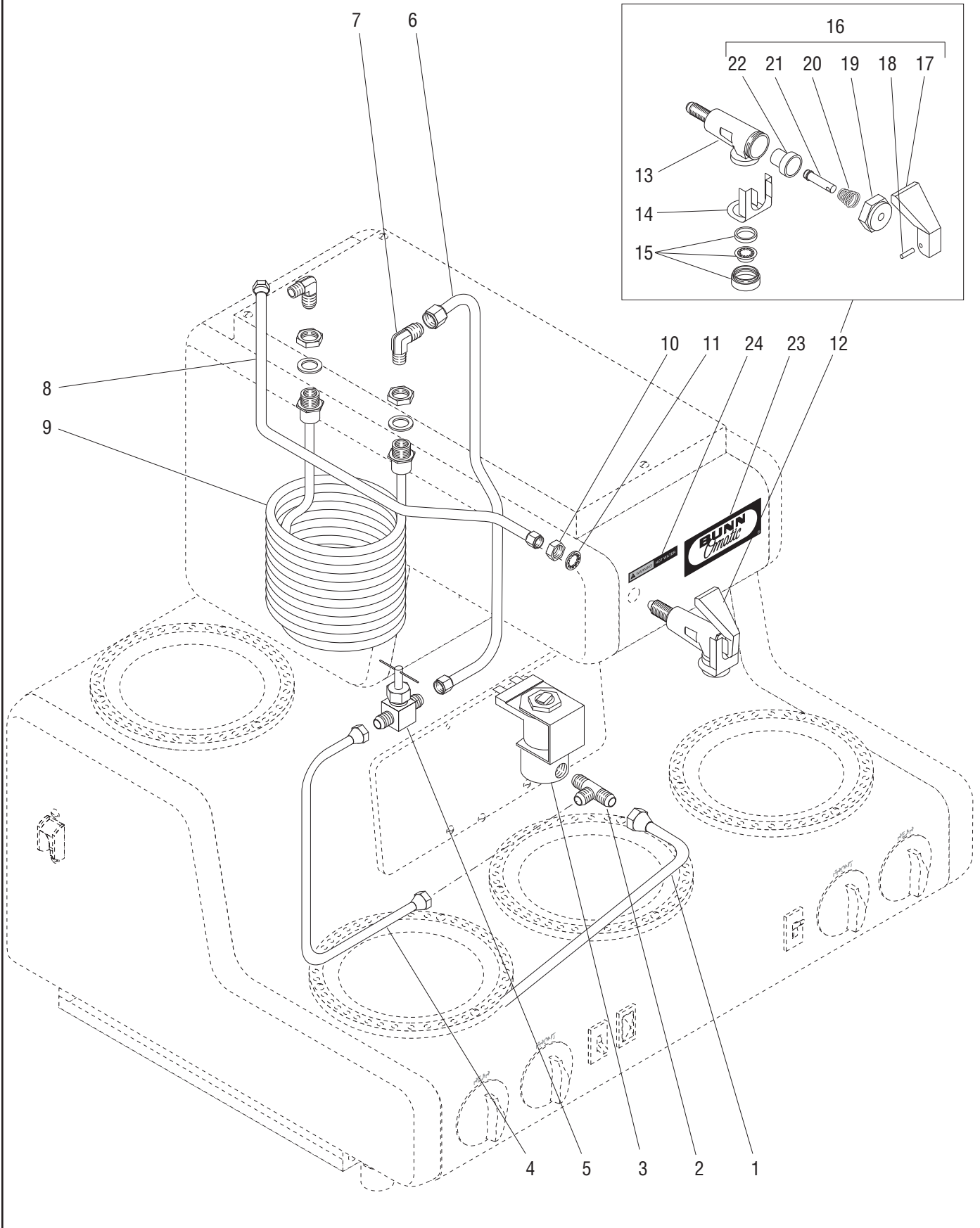
STRAINER/FLOW CONTROL (Models OT & RT)

ITEM	PART NO.	QTY.	DESCRIPTION
1	00305.0000	1	Tube
2	01171.0001	1	Check Valve (Includes item 3)
3	20554.0001*	1	Decal, Check Valve
4	00310.0002	1	Tube
	00310.0000	1	Tube (For use with 240V solenoid)
5	20528.1195	1	Flow Control, .195 GPM (Includes items 6 thru 9)
6	-----	1	Body (Order item 5)
7	20526.1195	1	Valve, Flow Control
8	01155.0000	1	Gasket, Flow Control
9	01154.0001	1	Outlet, Flow Control
10	-----	1	Solenoid, 120V, 1.48" Dia Coil (Not available, order 01085.0002)
	01085.0002	1	Solenoid, 120V, 1.00" Dia Coil (Includes items 11 thru 14)
	01975.0000	1	Solenoid, 240V (Includes items 11 thru 14)
	21180.0000	1	Solenoid, 200V (Includes items 11 thru 14)
	01326.0000	2	Screw, PNH PHH #10-32 x .25"
	01512.0000	2	Lockwasher, External-tooth #10
11	-----	1	Solenoid Valve Base, 1.48" Dia Coil (Not available, order 01085.0002)
	28479.0000	1	Solenoid Valve Base Kit, 1.00" Dia Coil (Includes O-ring)
12	01116.0000	1	Guide, 1.48" Dia Coil
	28481.0000	1	Guide Kit, 1.0" Dia Coil (Includes Washer and O-ring)
13	01101.0000	1	Solenoid Valve Coil, 120V, 1.48" Dia Coil
	28480.0000	1	Solenoid Valve Coil, 120V, 1.00" Dia Coil
	21181.0000	1	Solenoid Valve Coil, 200V
	01100.0000	1	Solenoid Valve Coil, 240V
14	01111.0000	1	Solenoid Valve Repair Kit, 1.48" Dia Coil (Includes Plunger, Seal and Spring)
	01111.0002	1	Solenoid Valve Repair Kit, 1.00" Dia Coil (Includes Plunger, Spring and O-ring)
15	00402.0001	1	Connector
16	00398.0002	1	Tee (Model RTF only)
17	01117.0000	1	Tube (Model OT-15 only)
18	01104.0000	1	Tube
19	23820.1000	1	Strainer (Includes items 20 thru 22)
20	-----	1	Body (Order item 17)
21	23721.0000	1	Screen
22	22249.0000	1	Cap, End
23	22293.0000	1	Adapter (Model OT-15 only)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®

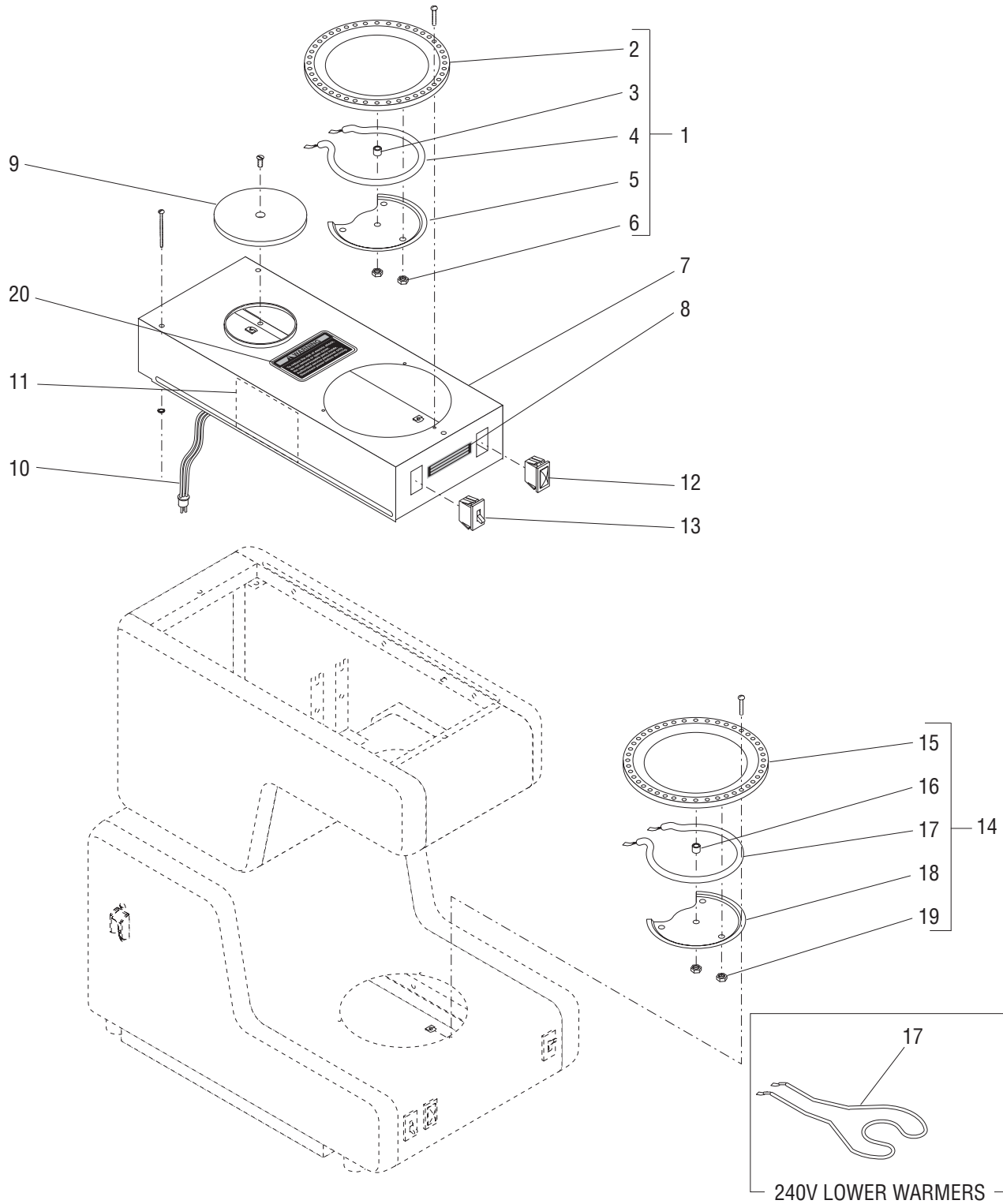
FAUCET & TUBING (Models RTF & RT & OT with Faucet Conversion)

**OL,RL
OT,RT**


FAUCET & TUBING (Models RTF & RT & OT with Faucet Conversion)

ITEM	PART NO.	QTY.	DESCRIPTION
1	-----	1	Tube (See STRAINER/FLOW CONTROL)
2	00398.0002	1	Tee
3	-----	1	Solenoid (See STRAINER/FLOW CONTROL)
4	22546.0000	1	Tube (Includes items 5 & 6)
5	00484.0001	1	Valve, Needle
6	20726.0000*	1	Tube (Order item 4)
7	00402.0001	2	Elbow
8	20747.0000	1	Tube
9	-----	1	Coil Assy (See TANK & COMPONENTS)
10	13059.0000	1	Nut
11	01532.0000	1	Lockwasher, Internal-tooth .438"
12	12915.0000	1	Faucet Assy (Includes items 13 thru 22)
13	-----	1	Body (Order item 12)
14	13057.0000	1	Clip, Safety
15	13058.0000	1	Aerator Kit
16	13061.0000	1	Handle/Stem Assy (Includes items 17 thru 22)
17	13053.0000	1	Handle Kit (Includes item 18)
18	02858.0000	1	Pin, Spring .125" Dia x .50"
19	13060.0000	1	Bonnet Nut
20	13055.0000	1	Spring
21	13054.0000	1	Stem
22	13056.0000	1	Seat Cup
23	00875.0000	1	Decal, BUNN-O-MATIC
24	20201.5600	1	Decal, WARNING HOT WATER

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

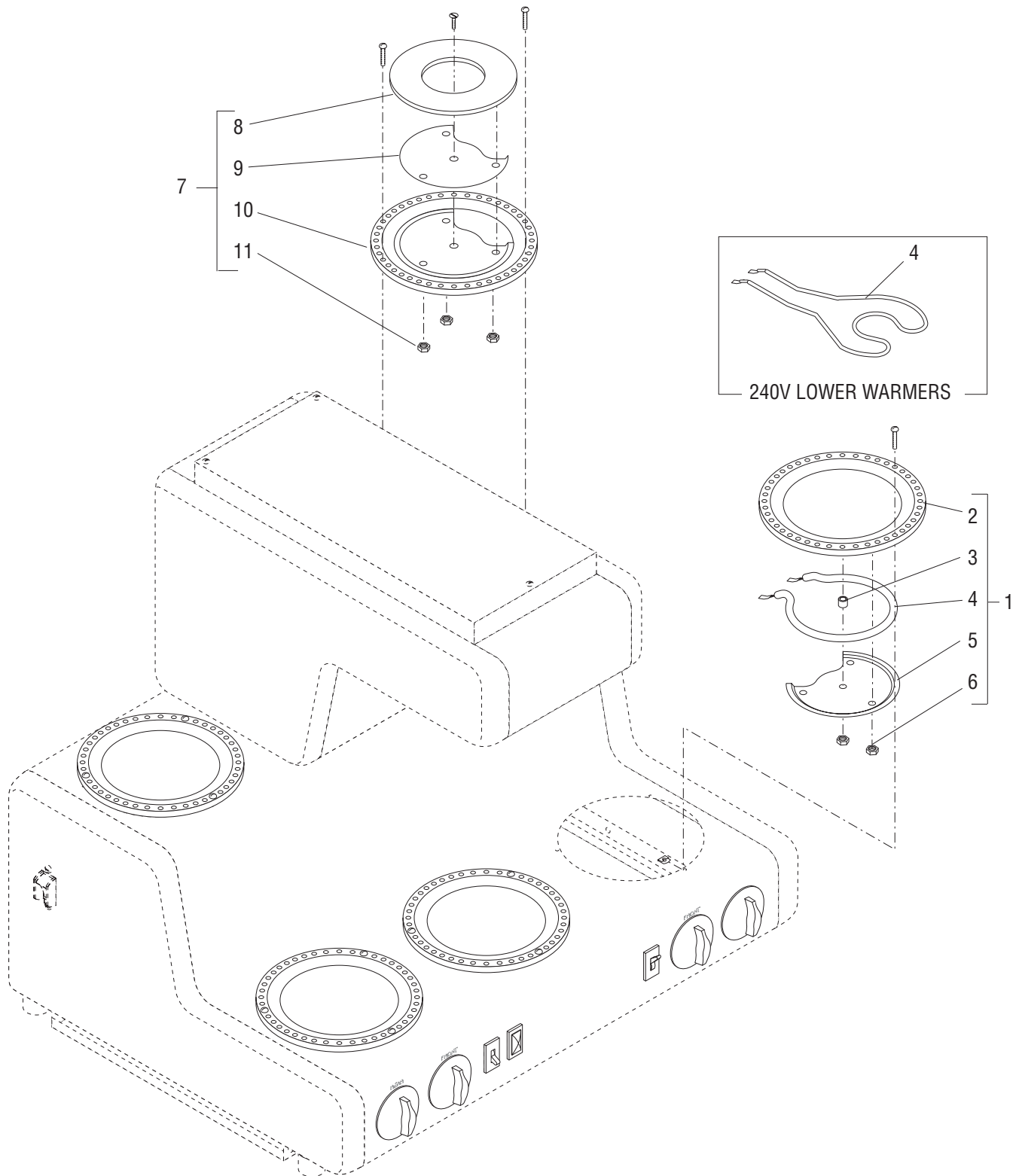
BUNN®**WARMER ASSEMBLIES (Models OL & OT)****OL,RL
OT,RT**

P1657

WARMER ASSEMBLIES (Models OL & OT)

ITEM	PART NO.	QTY.	DESCRIPTION
-	03810.1000	1	Warmer Housing Assy (Model OL)(Includes items 1 thru 13)
-	00225.1001	1	Warmer Housing Assy (Model OT)(Includes items 1 thru 8, 10, 12 & 13)
1	03652.0000	1	Warmer Assy, 100W/120V (Includes items 2 thru 6)
	02817.0000	1	Warmer Assy, 240V (Includes items 2 thru 6)
	11440.0011	1	Warmer Assy, 200V (Includes items 2 thru 6)
	01303.0000	3	Screw, PNH PHH #4-40 x .50"
	00916.0000	3	Fastener, "J" Type #4-40
2	03656.0000	1	Dish
3	13042.0001	1	Spacer
4	01227.0000	1	Element (100W/120V)
	01951.0000	1	Element (100W/240V)
	01951.0001	1	Element (100W/200V)
5	05212.0000	1	Plate
6	00970.0000	2	Nut
7	03813.0000*	1	Housing, Top Warmer (Model OL)
	05717.0000	1	Housing, Top Warmer (Model OT)
	01323.0000	3	Screw, #8-32 x 2.5" (Model OL)
	01371.0000	3	Screw, #8-32 x 4.0" (Model OT)
	01516.0000	3	Washer, Nylon Retaining
8	00804.0000	1	Decal, Decorative Stripe
9	01189.0000	1	Lid, Pour Over (Model OL only)
	01377.0000	1	Screw, FLH SLTD #8-32 x .75"
	00912.0000	1	Fastener, "J" Type #8-32
10	01860.0000	1	Harness, Top Warmer (120V)
	01860.0001*	1	Harness, Top Warmer (240V)
11	10007.0000*	1	Schematic, Electrical (Model OL only)
12	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
13	01186.0000	1	Switch, ON/OFF
14	03697.0000	1	Warmer Assy, 100W/120V (Includes items 15 thru 19)
	02817.0000	1	Warmer Assy, 100W/240V (Includes items 15 thru 19)
	01303.0000	3	Screw, PNH PHH #4-40 x .50"
	00916.0000	3	Fastener, "J" Type #4-40
15	03656.0000	1	Dish
16	13042.0001	1	Spacer (120V only)
17	01143.0000	1	Element (100W/120V)
	01951.0000	1	Element (100W/240V)
18	05212.0000	1	Plate
19	00970.0000	2	Nut
20	37881.0000	1	Decal, No Serviceable Parts

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

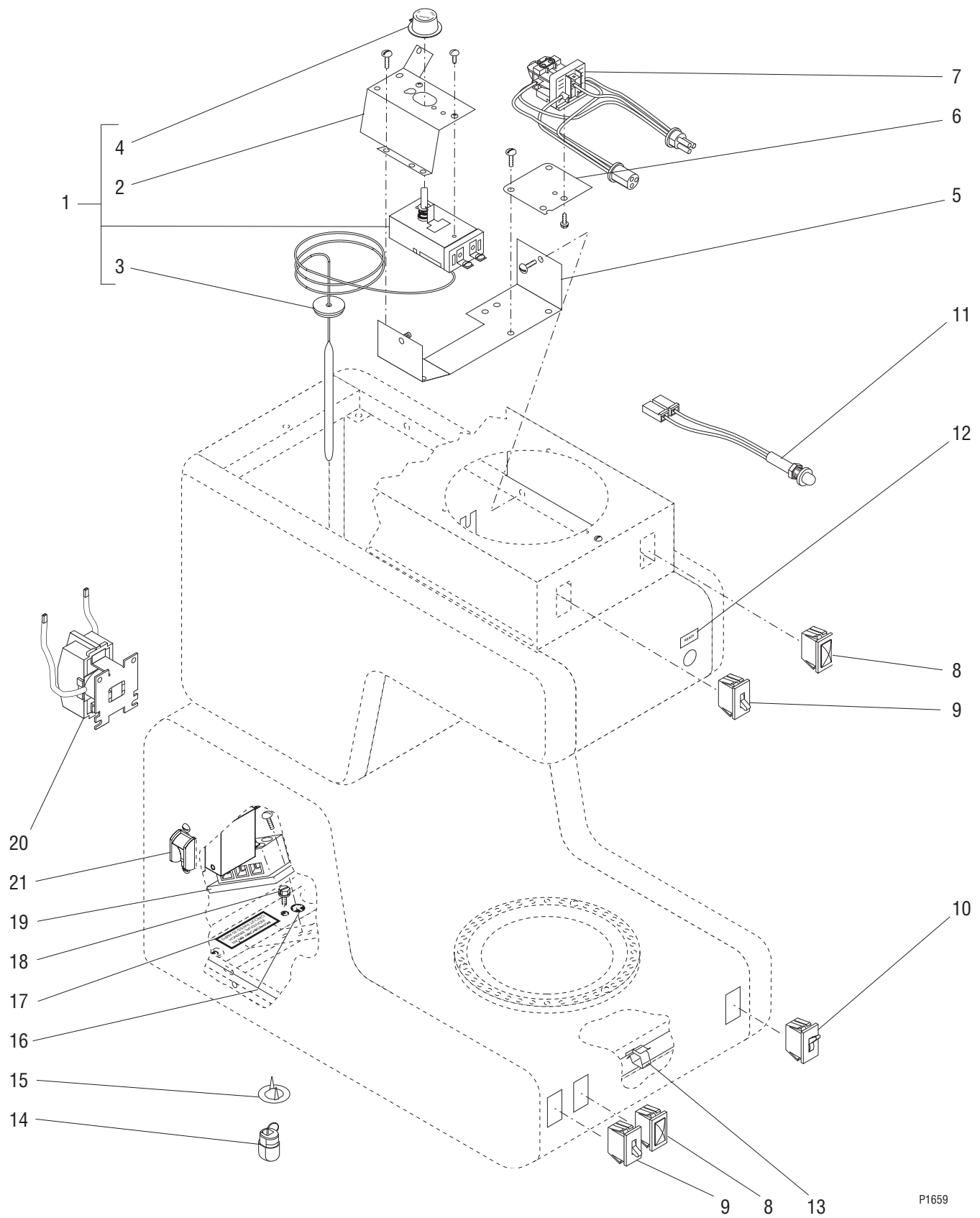
BUNN®**WARMER ASSEMBLIES (Models RL & RT)****OL,RL
OT,RT**

P1658

WARMER ASSEMBLIES (Models RL & RT)

ITEM	PART NO.	QTY.	DESCRIPTION	
1	03697.0000	5	Warmer Assy, 100W/120V (Includes items 2 thru 6)	
	02817.0000	5	Warmer Assy, 240V (Includes items 2 thru 6)	
	01303.0000	16	Screw, PNH PHH #4-40 x .50"	
	01304.0000	1	Screw, PNH PHH #4-40 x .75"	
	00916.0000	17	Fastener, "J" Type #4-40	
2	03656.0000	1	Dish	
3	13042.0001	1	Spacer (120V only)	
4	01143.0000	1	Element (100W/120V)	
	01951.0000	1	Element (100W/240V)	
5	05212.0000	1	Plate	
6	00970.0000	2	Nut	
7	03311.0000	1	Warmer Assy, High Heat 120V (Includes items 8 thru 11)	Models with High Heat Warmers
	-----	1	Warmer Assy, High Heat 240V (Includes items 8 thru 11)	
	01303.0000	3	Screw, PNH PHH #4-40 x .50"	
	00916.0000	3	Fastener, "J" Type #4-40	
8	01161.0000	1	Element, 120V (Includes hardware below)	
	01907.0000	1	Element, 240V (Includes hardware below)	
	01503.0000	3	Washer	
	00910.0000	3	Nut, Hex #10-32	
9	01198.0000	1	Plate, Retainer	
	01332.0000	1	Screw, PNH SLTD #10 x .50"	
10	01197.0000	1	Dish	
11	00909.0000	3	Nut, Brass #10-32	

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model OL)****OL,RL
OT,RT**

P1659

ELECTRICAL & OPERATING CONTROLS (Model OL)

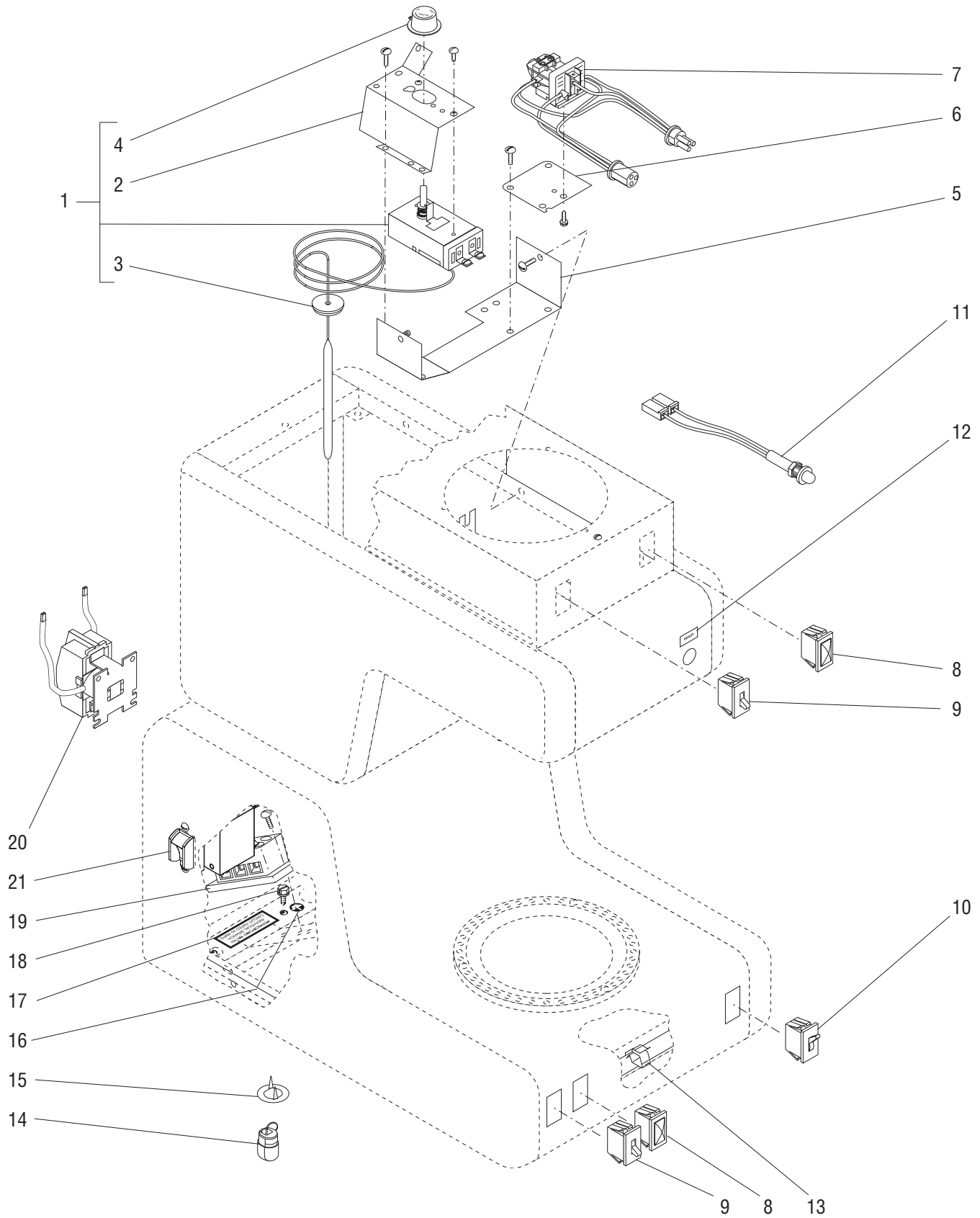
ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 thru 4)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	20771.0001	1	Bracket
	01315.0000	2	Screw, TRH PHH #8-32 x .375"
3	07073.0001	1	Grommet
4	00720.0000	1	Knob
5	05089.0000	1	Bracket, Component Mounting
	01315.0000	1	Screw, TRH PHH #8-32 x .375"
6	05000.0000	1	Plate
	02308.0000	2	Screw, PNH SLTD #8-32 x .375"
7	02056.1000	1	Relay (120V)
	01977.0000	1	Relay (240V)
	02328.0000	1	Screw, PNH SLTD #6-32 x .375"
8	01088.0000	2	Lamp (120V)
	01089.0000	2	Lamp (240V)
9	01186.0000	2	Switch, ON/OFF
10	01061.0000	1	Switch, MOMENTARY START
11	12984.0004	1	Lamp Assy, Ready (Model OL35B only)
12	20749.0000	1	Decal, READY (Model OL35B only)
13	00927.0000	1	Clip, Cable
14	01666.0000	1	Bushing, Strain Relief (Model OL15 only)
15	00715.0000	1	Washer, Strain Relief (Model OL15 only)
16	00824.0000	1	Decal, Grounding
17	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO (Not Applicable to model OL15)
18	01309.0000	1	Screw, Harness Grounding
19	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01317.0000	2	Screw, TRH PHH #8-32 x .50"
20	06335.1004	1	Contactor (Model OL25B only)
	01331.0000	2	Screw, RND SLTD #10-32 x .50"
21	38894.0001	1	Switch, Master ON/OFF
	01308.0002	2	Screw, Truss Head, Locking #6-32 x .25" (Mounting)
	01327.0000	4	Screw, Pan Head #10-32 x .38" (Terminals)
	01512.0000	4	Lockwasher, Ext.-tooth #10

(Continued)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model OL)****OL,RL
OT,RT**

(Continued)

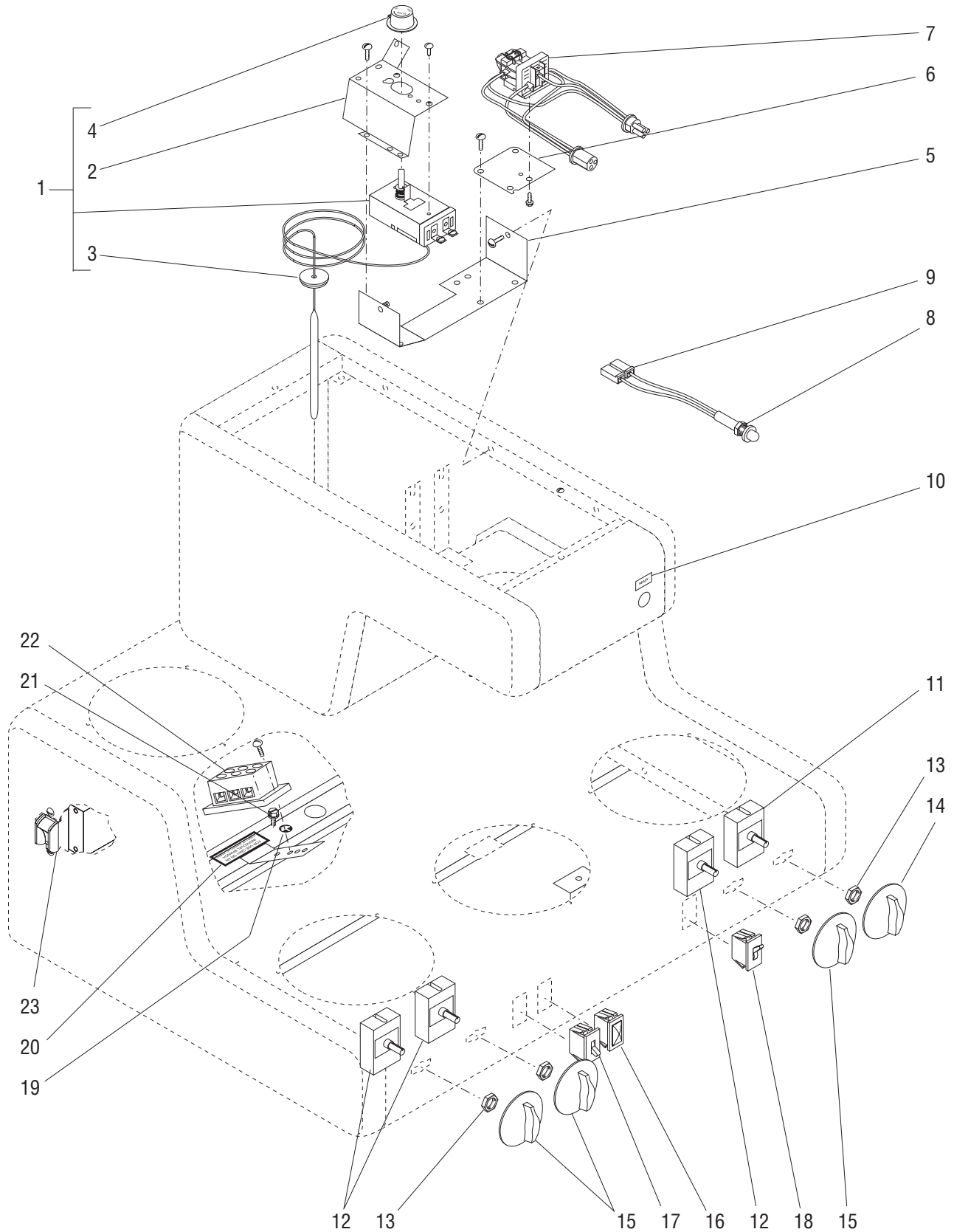


P1659

ELECTRICAL & OPERATING CONTROLS (Model OL)

ITEM	PART NO.	QTY.	DESCRIPTION
The following items are not illustrated			
22	01860.0000	1	Harness, Top Warmer, 120V
	01860.0001	1	Harness, Top Warmer, 240V
23	04513.0000	1	Power Cord (OL15 only)
24	06064.0000	1	Decal, Cord Warning (OL15 only)
25	03820.0000	1	Lead, Solenoid Jumper
26	21016.0028	1	Lead, BLK 27.0"
27	21016.0029	1	Lead, BLU/BLK 23.0"
28	05116.0000	1	Harness, Main (Models OL15 & 20)
	05116.0001	1	Harness, Main (Models OL15 & 20)(Models w/ Master ON/OFF Switch)
	05112.0000	1	Harness, Main (Model OL35)
	05112.0001	1	Harness, Main (Model OL35)(Models w/ Master ON/OFF Switch)
	05118.0000	1	Harness, Main (Model OL35A)
	22399.0000	1	Harness, Main (Model OL25B)
29	21016.0011	1	Lead, GRN/YEL 15.0" (Model OL35A)
30	21016.0027	1	Lead, GRN/YEL 26.0" (Model OL35A)
31	21016.0007	1	Lead, BLU/BLK 23.0" (Model OL35B)
32	21016.0155	1	Lead, BLK 27.0" (Model OL35B)
33	22362.0000	1	Harness, Ready Light (Model OL35B)
34	04243.0000	2	Terminal Housing (Model OL35B)
35	21012.0062*	1	Lead, BLK 10.0" (Model OL25B)
36	21012.0064*	1	Lead, BLK 10.0" (Model OL25B)
37	21012.0066	1	Lead, WHT 9.0" (Model OL25B)
38	21012.0067	1	Lead, WHT 9.0" (Model OL25B)
39	22356.0000	1	Lamp Assy, Ready (Model OL25B)
40	04243.0000	2	Terminal Housing (Model OL25B)
41	38920.0000	1	Harness, Wiring, Master ON/OFF Switch

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RL)****OL,RL
OT,RT**

P1660

ELECTRICAL & OPERATING CONTROLS (Model RL)

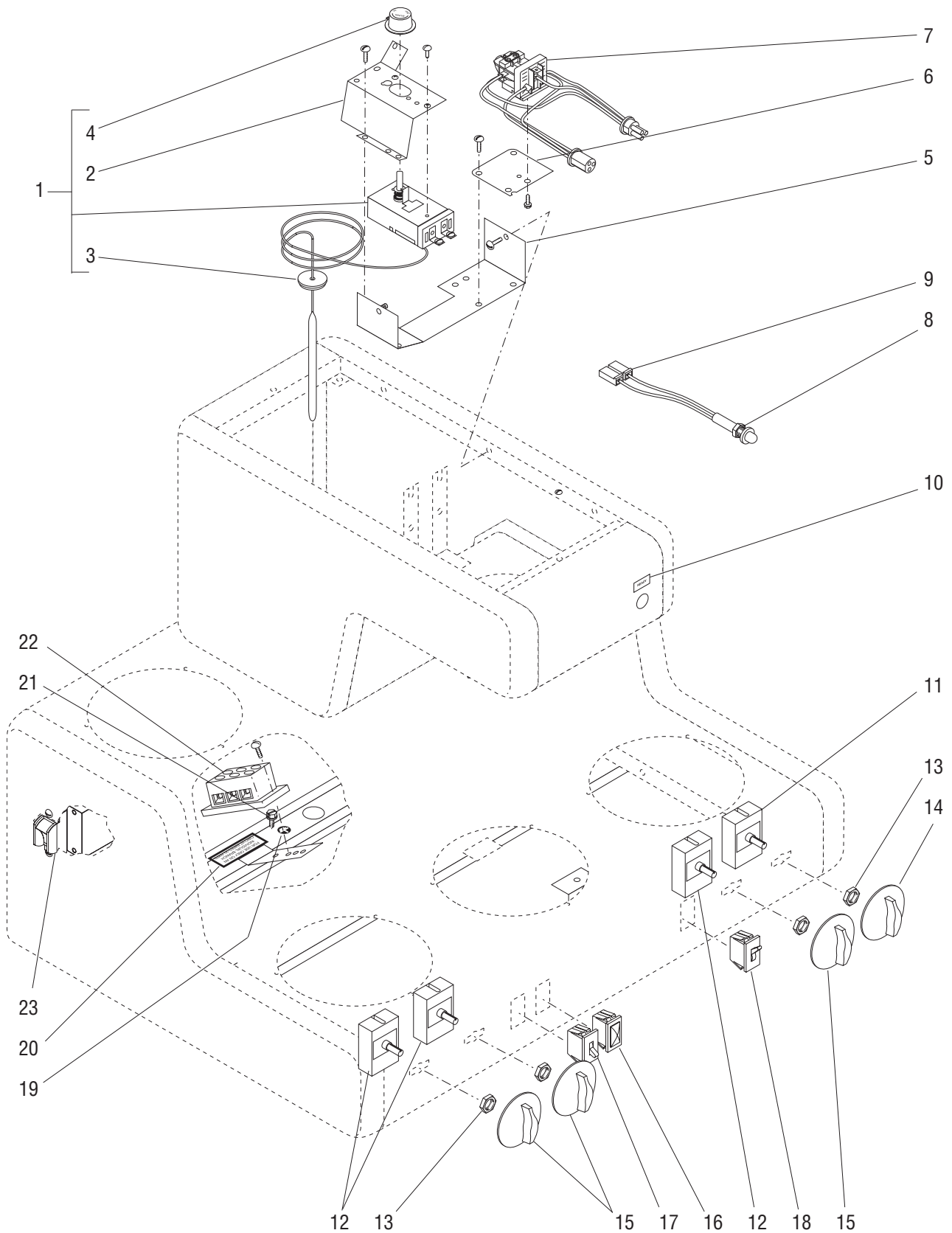
ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 thru 4)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	20771.0001	1	Bracket
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
3	07073.0001	1	Grommet
4	00720.0000	1	Knob
5	05089.0000	1	Bracket, Component Mounting
	01315.0000	1	Screw, TRH PHH #8-32 x .375"
6	05000.0000	1	Plate
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
7	02056.1000	1	Relay (120V)
	01977.0000	1	Relay (240V)
	02328.0000	1	Screw, PNH SLTD #6-32 x .375"
8	12984.0004	1	Lamp Assy, Ready (Model RL35B only)
9	04243.0000	2	Terminal Housing (Model RL35B only)
10	20749.0000	1	Decal, READY (Model RL35B only)
11	01053.1000	1	Switch, Rotary OFF/LO/MED/HI (Models with High Heat Warmer)
12	01052.0000	5	Switch, Rotary ON/OFF (One less used on models with High Heat Warmer)
13	00990.0000	5	Nut, Hex .375-24"
14	01055.0000	1	Knob, OFF/LO/MED/HI (Models with High Heat Warmer)
15	01054.0000	5	Knob, ON/OFF (One less used on models with High Heat Warmer)
16	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
17	01186.0000	1	Switch, ON/OFF
18	01061.0000	1	Switch, MOMENTARY START
19	00824.0000	1	Decal, Grounding
20	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO
21	01309.0000	1	Screw, Harness Grounding
22	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01317.0000	2	Screw, TRH PHH #8-32 x .50"
23	38894.0001	1	Switch, Master ON/OFF
	01308.0002	2	Screw, Truss Head, Locking #6-32 x .25" (Mounting)
	01327.0000	4	Screw, Pan Head #10-32 x .38" (Terminals)
	01512.0000	4	Lockwasher, Ext.-tooth #10

(Continued)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RL)****OL,RL
OT,RT**

(Continued)

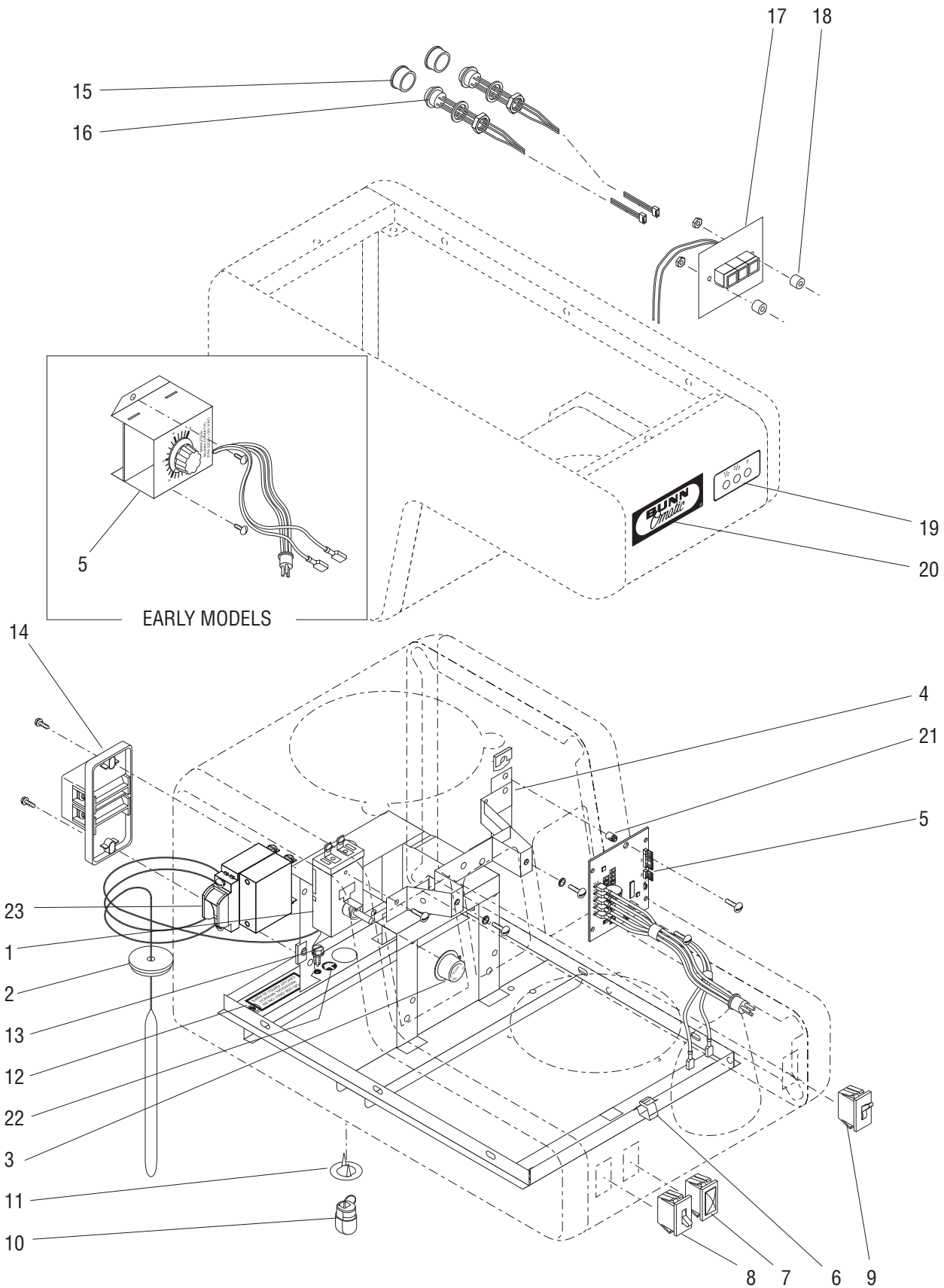


P1660

ELECTRICAL & OPERATING CONTROLS (Model RL)

ITEM	PART NO.	QTY.	DESCRIPTION
The following items are not illustrated			
24	05113.0000	1	Harness, Main (Model RL)(Models w/ High Heat Warmer)
	22360.0000	1	Harness, Main (Model RL)(Models w/oHigh Heat Warmer)
	22360.0002	1	Harness, Main (Model RL)(Models w/oHigh Heat Warmer)(Models w/ Master ON/OFF Switch)
	05117.0000*	1	Harness, Main (Models RLA & RLB)(Models with High Heat Warmer)
	05117.0002	1	Harness, Main (Models RLA & RLB)(Models without High Heat Warmer)
25	21016.0028	1	Lead, BLK 27.0"
26	21016.0029	1	Lead, BLU/BLK 23.0"
27	03820.0000	1	Lead, Solenoid Jumper
28	22354.0000	1	Wire, Ground (Model RLA)
29	22362.0000	1	Harness, Ready Light (Model RL35B)
30	21016.0155	1	Lead, BLK 27.0"
31	21016.0007	1	Lead, BLU/BLK 23.0"
32	38920.0000	1	Harness, Wiring, Master ON/OFF Switch

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model OT)****OL,RL
OT,RT**

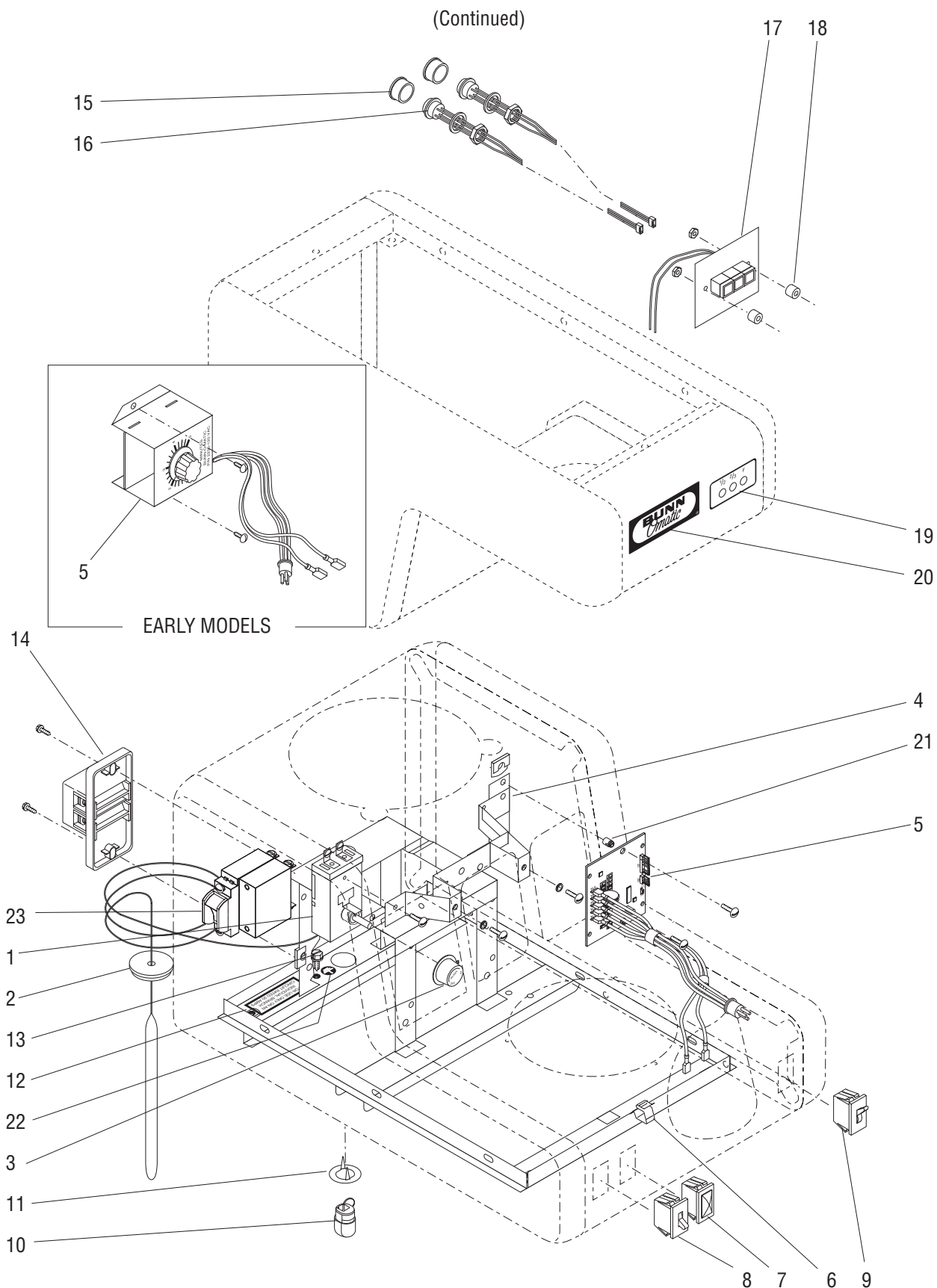
P1661

ELECTRICAL & OPERATING CONTROLS (Model OT)

ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 & 3)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	07073.0001	1	Grommet
3	00720.0000	1	Knob
4	04752.0000	1	Bracket, Component Mounting
	02308.0000	2	Screw, PHH SLTD w/serr #8-32 x .38"
	00970.0000	2	Nut, KEPS #8-32
5	32400.0000	1	Timer, Digital 120V
	32400.0001	1	Timer, Digital 240V
	01320.0000	2	Screw, RDH SLTD #8-32 x 1.0"
	00912.0000	2	Fastener, "J" Type #8-32
6	00927.0000	1	Clip, Cable
7	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
8	01186.0000	1	Switch, ON/OFF
9	01061.0000	1	Switch, MOMENTARY START
10	01666.0000	1	Bushing, Strain Relief (Model OT15 only)
11	00715.0000	1	Washer, Strain Relief (Model OT15 only)
12	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO (Not Applicable to model OT15)
13	01309.0000	1	Screw, Harness Grounding
14	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01370.0000	2	Screw, PNH SLTD #8-32 x .75"
	00912.0000	2	Fastener, "J" Type #8-32
15	27657.0000	2	Cap, Plastic (OT35 w/Grinder Interface)
16	05187.0000	2	Harness (OT35 w/Grinder Interface)
17	05178.0000	1	Switch, Control Board (OT35 w/Grinder Interface)
	00973.0000	2	Nut, KEPS #6-32
18	01533.0002	2	Spacer (OT35 w/Grinder Interface)
19	05177.0000*	1	Decal, Switch (OT35 w/Grinder Interface)
20	00875.0000	1	Decal, BUNN-O-MATIC (OT35 w/Grinder Interface)
21	32530.0001	2	Spacer (Models with Digital Timer)
22	00824.0000	1	Decal, Grounding
23	38894.0001	1	Switch, Master ON/OFF
	01308.0002	2	Screw, Truss Head, Locking #6-32 x .25" (Mounting)
	01327.0000	4	Screw, Pan Head #10-32 x .38" (Terminals)
	01512.0000	4	Lockwasher, Ext.-tooth #10

(Continued)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

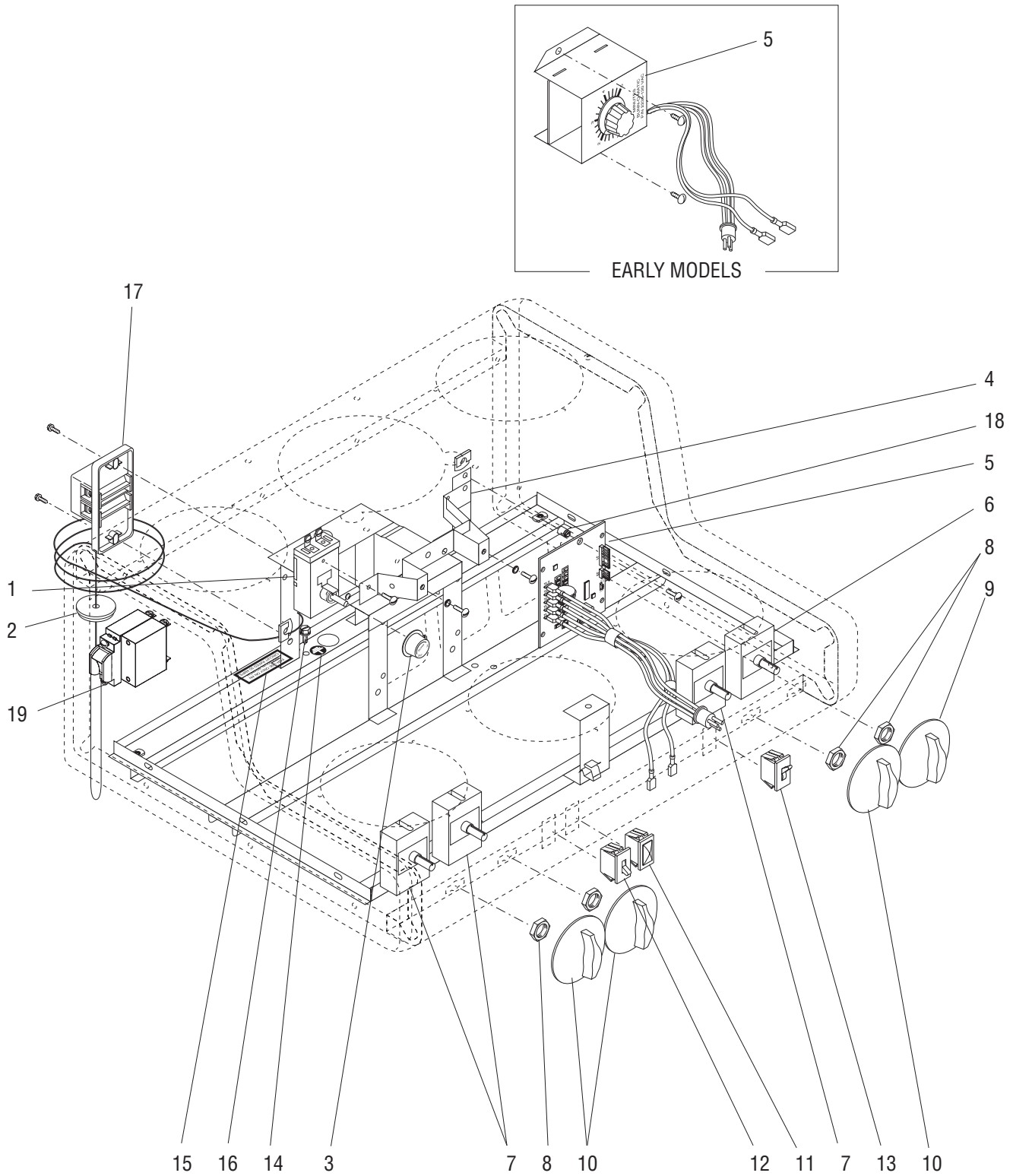


P1661

ELECTRICAL & OPERATING CONTROLS (Model OT)

ITEM	PART NO.	QTY.	DESCRIPTION
The following items are not illustrated			
24	01668.0000*	2	Wire Nut, ORN (OT35 w/Grinder Interface)
25	05186.0000	1	Harness (OT35 w/Grinder Interface)
26	01870.0000	1	Harness, Main (Models OT15 & 20)
	34950.0001	1	Harness, Main (Models OT15 & 20)(Models w/ Master ON/OFF Switch)
	01869.0000*	1	Harness, Main (Model OT35)
	01869.0001	1	Harness, Main (Model OT35)(Models w/ Master ON/OFF Switch)
	22476.0000	1	Harness, Main (OT35 w/Grinder Interface)
27	04513.0000	1	Power Cord (OT15 only)
28	06064.0000	1	Decal, Cord Warning (OT15 only)
29	21016.0028	1	Lead, BLK 27.0"
30	21016.0029	1	Lead, BLU/BLK 23.0"
31	38920.0000	1	Wiring Harness, Master ON/OFF Switch

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RT)****OL,RL
OT,RT**

P1662

ELECTRICAL & OPERATING CONTROLS (Model RT)

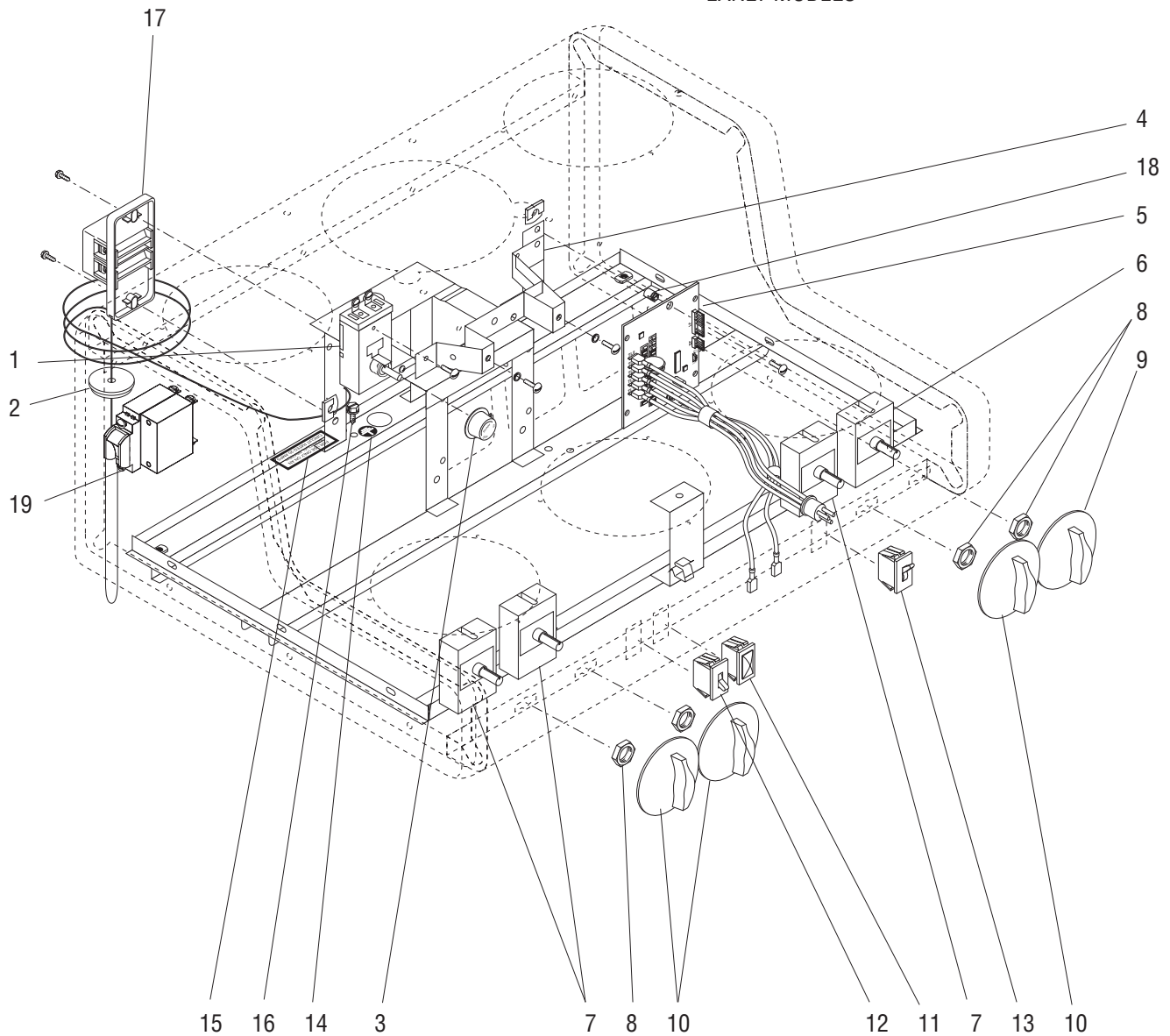
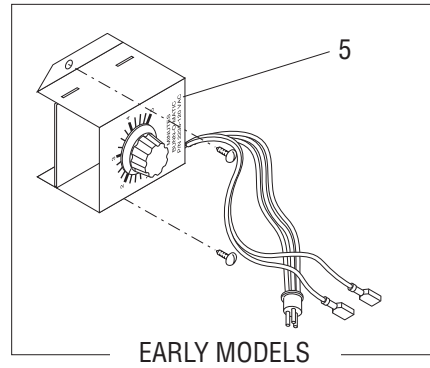
ITEM	PART NO.	QTY.	DESCRIPTION
1	04314.0001	1	Thermostat Assy (Includes items 2 & 3)
	02328.0003	1	Screw, PNH SLTD #6-32 x .312"
2	07073.0001	1	Grommet
3	00720.0000	1	Knob
4	04752.0000	1	Bracket, Component Mounting
	01315.0000	2	Screw, TRH PNH #8-32 x .375"
	01519.0000	2	Lockwasher #8
	00970.0000	2	Nut, KEPS #8-32
5	32400.0000	1	Timer, Digital 120V
	32400.0001	1	Timer, Digital 240V
	01320.0000	2	Screw, RDH SLTD #8-32 x 1.0"
	00912.0000	2	Fastener, "J" Type #8-32
6	01053.1000	1	Switch, Rotary OFF/LO/MED/HI (Models with High Heat Warmer)
7	01052.0000	4	Switch, Rotary ON/OFF (One less used on models with High Heat Warmer)
8	00990.0000	4	Nut, Hex .375-24"
9	01055.0000	1	Knob, OFF/LO/MED/HI (Models with High Heat Warmer)
10	01054.0000	4	Knob, ON/OFF (One less used on models with High Heat Warmer)
11	01088.0000	1	Lamp (120V)
	01089.0000	1	Lamp (240V)
12	01186.0000	1	Switch, ON/OFF
13	01061.0000	1	Switch, MOMENTARY START
14	00824.0000	1	Decal, Grounding
15	00985.0000	1	Decal, INDIVIDUAL CIRCUIT INFO
16	01309.0000	1	Screw, Harness Grounding
17	01106.0001	1	Terminal Block, 2-pole RED/BLK
	01106.0000	1	Terminal Block, 2-pole WHT/BLK
	07038.0000	1	Terminal Block, 3-pole RED/WHT/BLK
	01370.0000	2	Screw, PNH SLTD #8-32 x .75"
	00912.0000	2	Fastener, "J" Type #8-32
18	32530.0001	2	Spacer (Models with Digital Timer)
19	38894.0001	1	Switch, Master ON/OFF
	01308.0002	2	Screw, Truss Head, Locking #6-32 x .25" (Mounting)
	01327.0000	4	Screw, Pan Head #10-32 x .38" (Terminals)
	01512.0000	4	Lockwasher, Ext.-tooth #10

(Continued)

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**ELECTRICAL & OPERATING CONTROLS (Model RT)****OL,RL
OT,RT**

(Continued)

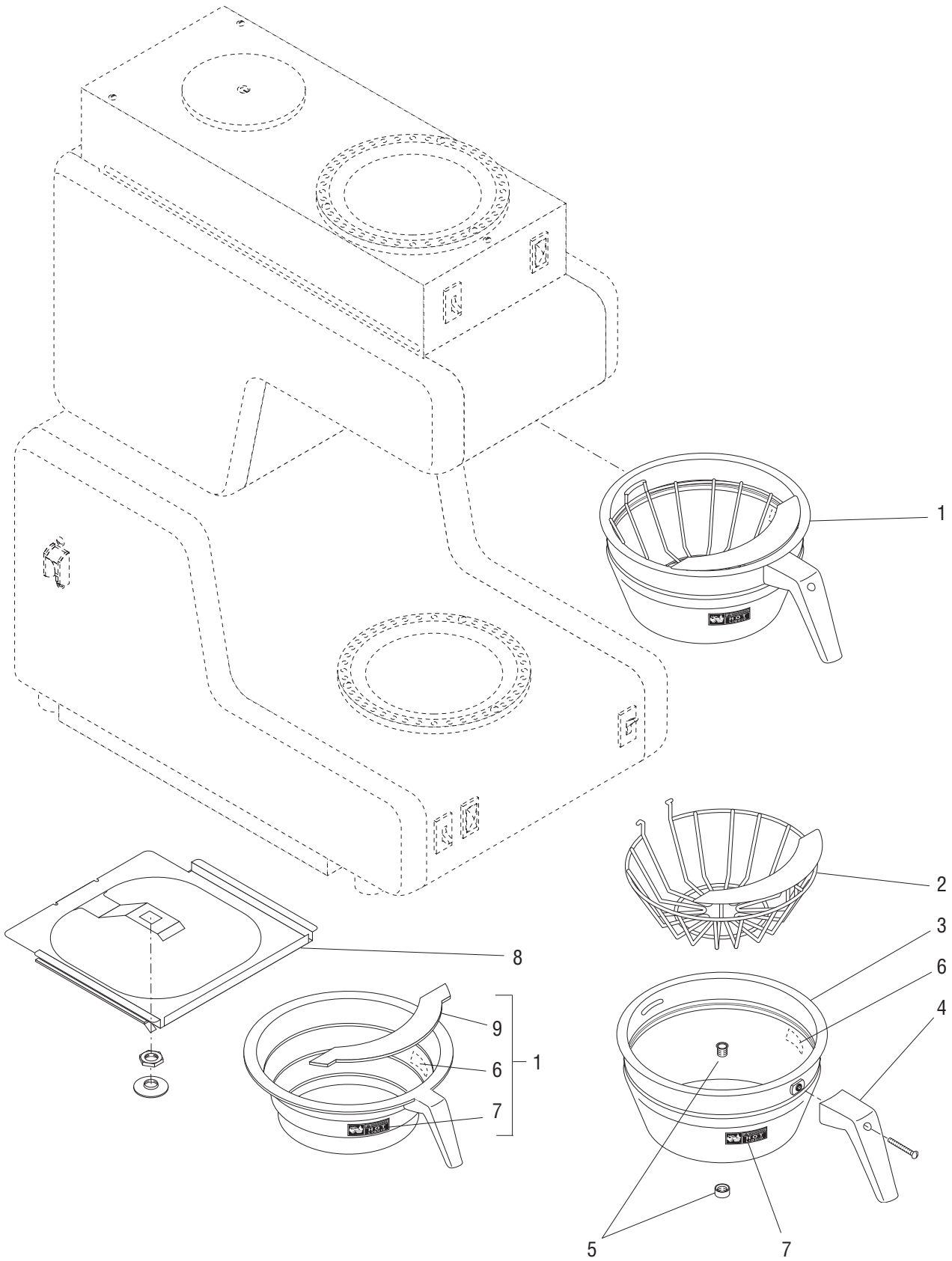


P1662

ELECTRICAL & OPERATING CONTROLS (Model RT)

ITEM	PART NO.	QTY.	DESCRIPTION
The following items are not illustrated			
20	21016.0028	1	Lead, BLK 27.0"
21	21016.0029	1	Lead, BLU/BLK 23.0"
22	01825.0000	1	Harness, Main, 120V (Models RT & RTF)(Models with High Heat Warmer)
	01825.0002	1	Harness, Main, 120V (Models RT & RTF)(Models without High Heat Warmer)
	34902.0003	1	Harness, Main, 120V (Models RT & RTF)(Models without High Heat Warmer)(Models w/ Master ON/OFF Switch)
	22430.0000	1	Harness, Main, 120V (Model RT Galley)(Models with High Heat Warmer)
	22430.0002	1	Harness, Main, 120V (Model RT Galley)(Models without High Heat Warmer)
	01826.0000	1	Harness, Main, 240V (Model RTA)(Models with High Heat Warmer)
	01826.0002	1	Harness, Main, 240V (Model RTA)(Models without High Heat Warmer)
23	22354.0000	1	Wire, Ground (Model RTA)
24	38920.0000	1	Harness, Wiring, Master ON/OFF Switch

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

BUNN®**FUNNELS & BASKETS****OL,RL
OT,RT**

P1663

FUNNELS & BASKETS

ITEM	PART NO.	QTY.	DESCRIPTION
1	20217.0000	1	Funnel, SST w/Black Handle (7.625" Dia)(Includes items 2 thru 5)
	20217.0001	1	Funnel, SST w/Orange Handle (7.625" Dia)(Includes items 2 thru 5)
	20583.0002	1	Funnel, Smoke Plastic (7.25" Dia)(Includes items 6,7 & 9)
	29351.0000	1	Funnel, Smoke Plastic (7.625" Dia)(Includes items 6,7 & 9)
2	33090.0000	1	Filter Basket w/Splash Guard
3	28554.0000	1	Funnel w/Decals (Includes items 6 & 7)
4	20244.1000	1	Handle Kit, Black (Includes screw)
	20244.1001	1	Handle Kit, Orange (Includes screw)
	01331.0002	1	Screw, Round Head #10-32 x 1.50"
5	01031.0000	1	Funnel Tip Kit
6	03408.0002	1	Decal, WARNING-REMOVE FUNNEL
7	03409.0002	1	Decal, WARNING-HOT LIQUID
8	23379.0001	1	Adapter, Funnel (For use with 7.25" Dia Funnel)
9	32964.0000	1	Splash Guard

* Indicates the part number listed is for reference only. See DESCRIPTION for possible service replacement.

NUMERICAL INDEX

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
00225.1001.....	25	01054.0000.....	33,41	01519.0000.....	41	04626.0001.....	17
00305.0000.....	21	01055.0000.....	33,41	01522.0000.....	15	04636.1000.....	17
00310.0000.....	21	01061.0000.....	29,33,37,41	01527.0000.....	13	04637.1000.....	17
00310.0002.....	21	01075.0000.....	15,17	01532.0000.....	19,23	04752.0000.....	37,41
00398.0002.....	21,23	01082.0000.....	15,17	01533.0002.....	37	04831.0000.....	13
00400.0001.....	17	01085.0002.....	19,21	01666.0000.....	29,37	04970.0000.....	11
00402.0001.....	19,21,23	01088.0000.....	25,29,33,37,41	01668.0000.....	39	04974.0000.....	9
00406.0001.....	9,11,17	01089.0000.....	25,29,33,37,41	01825.0000.....	43	05000.0000.....	29,33
00432.0001.....	19	01100.0000.....	19,21	01825.0002.....	43	05005.0000.....	7,11
00458.0001.....	19	01101.0000.....	19,21	01826.0000.....	43	05014.0000.....	5,9
00459.0001.....	19	01104.0000.....	19,21	01826.0002.....	43	05016.0000.....	5,7,9,11
00462.0001.....	5,7	01106.0000.....	29,33,37,	01860.0000.....	25,31	05017.0000.....	5,7,9,11
00463.0000.....	19	01106.0001.....	29,33,41	01860.0001.....	25,31	05023.0002.....	9
00465.0001.....	19	01111.0000.....	19,21	01869.0000.....	39	05023.1000.....	9
00484.0001.....	23	01111.0002.....	19,21	01869.0001.....	39	05025.1000.....	9
00606.0000.....	5,7,9,11	01116.0000.....	19,21	01870.0000.....	39	05025.1000.....	11
00656.0000.....	5,7,9,11	01117.0000.....	21	01907.0000.....	27	05027.0002.....	11
00658.0000.....	5,7,9,11	01119.0000.....	19	01928.0000.....	15,17	05027.1000.....	11
00688.0000.....	7,11	01138.0000.....	19	01951.0000.....	25,27	05031.0000.....	15
00715.0000.....	5,9,29,37	01139.0000.....	19	01951.0001.....	25	05032.1000.....	13
00720.0000.....	29,33,37,41	01143.0000.....	25,27	01975.0000.....	19,21	05033.1000.....	13
00751.0000.....	5,7,9,11	01154.0001.....	21	01977.0000.....	29,33	05036.1000.....	13
00752.0000.....	5,7,9,11	01155.0000.....	21	02056.1000.....	29,33	05037.1000.....	13
00754.0001.....	5,7,9,11	01161.0000.....	27	02308.0000.....	13,19,29,33,37	05038.0000.....	13
00774.0000.....	9,11	01171.0001.....	21	02310.0000.....	5,7,9,11	05039.0000.....	13
00803.0000.....	7	01186.0000.....	25,29,33,37,41	02328.0000.....	29,33	05067.0000.....	15
00804.0000.....	25	01189.0000.....	7,25	02328.0003.....	29,33,37,41	05070.0000.....	15
00822.0000.....	11	01197.0000.....	27	02434.1000.....	5,7,9,11,15	05078.0000.....	13
00823.0000.....	5,7,9	01198.0000.....	27	02713.0000.....	13	05082.0000.....	13
00823.0000.....	11	01227.0000.....	25	02745.0000.....	13	05084.0000.....	13
00824.0000.....	29,33,37,41	01303.0000.....	25,27	02746.0000.....	13	05089.0000.....	29,33
00831.0000.....	5,7,9,11	01304.0000.....	27	02747.0000.....	13	05092.0000.....	7
00875.0000.....	9,11,23,37	01308.0002.....	29,33,37,41	02755.1000.....	13	05092.1000.....	7
00908.0000.....	13,15,17	01309.0000.....	29,33,37,41	02756.1000.....	13	05096.0000.....	19
00909.0000.....	27	01311.0000.....	5,7,9,11	02775.0000.....	13	05101.0000.....	7
00910.0000.....	27	01315.0000.....	5,7,9,11	02817.0000.....	25,27	05102.0000.....	5
00912.0000.....	7,25,37,41	01315.0000.....	29,33,41	02858.0000.....	23	05103.1000.....	5,7
00916.0000.....	25,27	01317.0000.....	29,33	03311.0000.....	27	05103.1001.....	5
00917.0000.....	5,7,9,11	01318.0000.....	9,11	03408.0002.....	45	05105.0000.....	5
00927.0000.....	5,9,29,37	01320.0000.....	5,7,9	03409.0002.....	45	05105.1002.....	5
00929.0001.....	13,15,17	01320.0000.....	11,37,41	03652.0000.....	25	05106.0000.....	13
00932.0000.....	15	01322.0000.....	11	03656.0000.....	25,27	05106.0001.....	13
00935.0001.....	15	01323.0000.....	25	03697.0000.....	25,27	05108.0000.....	13
00942.0000.....	15,17	01326.0000.....	21	03807.0000.....	13	05110.1000.....	13
00943.0000.....	13,17	01327.0000.....	19,29,33,37,41	03810.1000.....	25	05112.0000.....	31
00946.0000.....	13	01331.0000.....	5,7,9,11,29	03811.1000.....	7	05112.0001.....	31
00970.0000.....	13,15,25	01331.0002.....	45	03813.0000.....	25	05113.0000.....	35
00970.0000.....	27,37,41	01332.0000.....	27	03820.0000.....	19,31,35	05116.0000.....	31
00971.0000.....	5,7,9,11	01370.0000.....	15,37,41	03989.0000.....	13	05116.0001.....	31
00973.0000.....	37	01371.0000.....	7,25	04129.0000.....	17	05117.0000.....	35
00978.0000.....	5,7,9,11	01377.0000.....	7,25	04221.0000.....	17	05117.0002.....	35
00985.0000.....	29,33,37,41	01502.0000.....	19	04236.1000.....	17	05118.0000.....	31
00990.0000.....	33,41	01503.0000.....	27	04243.0000.....	31,33	05119.0000.....	19
01031.0000.....	45	01512.0000.....	5,7,9,11,21	04314.0001.....	29,33,37,41	05177.0000.....	37
01052.0000.....	33,41	01512.0000.....	29,33,37,41	04513.0000.....	31,39	05178.0000.....	37
01053.1000.....	33,41	01516.0000.....	5,7,9,11,25	04626.0000.....	15,17	05186.0000.....	39

NUMERICAL INDEX

PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.	PART NO.	PAGE NO.
05187.0000.....	37	21012.0067.....	31				
05194.0000.....	9	21016.0007.....	31,35				
05212.0000.....	25,27	21016.0011.....	31				
05515.0000.....	17	21016.0027.....	31				
05518.0000.....	17	21016.0028.....	31,35,39,43				
05533.0000.....	17	21016.0029.....	31,35,39,43				
05533.0002.....	17	21016.0122.....	17				
05553.0000.....	17	21016.0155.....	31,35				
05682.1000.....	17	21180.0000.....	19,21				
05683.1000.....	17	21181.0000.....	19,21				
05684.0000.....	17	22249.0000.....	19,21				
05717.0000.....	25	22293.0000.....	19,21				
06064.0000.....	31,39	22351.1000.....	7,11				
06335.1004.....	29	22354.0000.....	35,43				
07038.0000.....	29,33,37,41	22356.0000.....	31				
07073.0001.....	29,33,37,41	22357.1002.....	11				
10007.0000.....	25	22357.1003.....	9				
10277.0000.....	11	22358.1000.....	5,9				
10278.0000.....	9	22358.1001.....	5				
11440.0011.....	25	22358.1002.....	9				
12364.0000.....	5,7,9,11	22360.0000.....	35				
12687.0000.....	17	22360.0002.....	35				
12688.0000.....	17	22362.0000.....	31,35				
12689.1000.....	17	22399.0000.....	31				
12915.0000.....	23	22428.1000.....	11				
12984.0004.....	29,33	22430.0000.....	43				
13042.0001.....	25,27	22430.0002.....	43				
13053.0000.....	23	22476.0000.....	39				
13054.0000.....	23	22546.0000.....	23				
13055.0000.....	23	23379.0001.....	45				
13056.0000.....	23	23721.0000.....	19,21				
13057.0000.....	23	23820.1000.....	19,21				
13058.0000.....	23	24684.0000.....	15				
13059.0000.....	23	27657.0000.....	37				
13060.0000.....	23	28479.0000.....	19,21				
13061.0000.....	23	28480.0000.....	19,21				
20201.4300.....	19	28481.0000.....	19,21				
20201.5600.....	23	28554.0000.....	45				
20211.0100.....	17	29329.1000.....	15,17				
20217.0000.....	45	29351.0000.....	45				
20217.0001.....	45	32400.0000.....	37,41				
20244.1000.....	45	32400.0001.....	37,41				
20244.1001.....	45	32423.0000.....	11				
20526.1195.....	21	32424.0000.....	7				
20528.1195.....	21	32530.0001.....	37,41				
20554.0001.....	21	32540.0000.....	9,11				
20583.0002.....	45	32964.0000.....	45				
20726.0000.....	23	33090.0000.....	45				
20747.0000.....	23	34902.0003.....	43				
20749.0000.....	29,33	34950.0001.....	39				
20768.0000.....	13	37881.0000.....	5,7,9,11,25				
20771.0001.....	29,33	38894.0001.....	29,33,37,41				
20942.1000.....	13	38920.0000.....	31,35,39,43				
21012.0062.....	31						
21012.0064.....	31						
21012.0066.....	31						

NAVSEA/SPAWAR TECHNICAL MANUAL DEFICIENCY/EVALUATION REPORT (TMDER)

INSTRUCTIONS: Continue on 8 ½" x 11" page if additional space is needed.

1. Use this report to indicate deficiencies, problems and recommendations relating to publications.
2. For CLASSIFIED TMDERs see OPNAVINST 5510H for mailing requirements.
3. For TMDERs that affect more than one publication, submit a separate TMDER for each.
4. Submit TMDERs at web site <https://nsdsa2.phdnswc.navy.mil> or mail to: **COMMANDER, CODE 310 TMDER BLDG 1389, NAVSURFWARCENDIV NSDSA, 4363 MISSILE WAY, PORT HUENEME CA 93043-4307**

1. PUBLICATION NUMBER	2. VOL/PART	3. REV/DATE OR CHG/DATE	4. SYSTEM/EQUIPMENT ID
5. TITLE OF PUBLICATION			6. REPORT CONTROL NUMBER (6 digit UIC-YY-any four: xxxxxx-03-xxxx)
7. RECOMMEND CHANGES TO PUBLICATION			
7a. Page #	7b. Para #	7c. RECOMMENDED CHANGES AND REASONS	
8. ORIGINATOR'S NAME AND WORK CENTER		9. DATE	10. ORIGINATOR'S E-MAIL ADDRESS
			11. TMMA of Manual (NSDSA will complete)
12. SHIP OR ACTIVITY Name and Address (Include UIC/CAGE/HULL)		13. Phone Numbers:	
		Commercial () -	
		DSN -	
		FAX () -	

FOLD HERE AND TAPE SECURELY
PLEASE DO NOT STAPLE

INCLUDE COMPLETE ADDRESS

**USE PROPER
POSTAGE**

FOR OFFICE USE ONLY

COMMANDER
CODE 310 BLDG 1389
NAVSURFWARCENDIV NSDSA
4363 MISSILE WAY
PORT HUENEME, CA 93043-4307

FOLD HERE AND TAPE SECURELY
PLEASE DO NOT STAPLE